

**HALEY &
ALDRICH**

MID 980 208 570

CURRENT CONDITIONS SUMMARY

**DELPHI CORPORATION
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN**

12/2006

CURRENT CONDITIONS SUMMARY

**DELPHI CORPORATION
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN**

US EPA ID #MID980568570

by

**Haley & Aldrich, Inc.
Cleveland, Ohio**

for

**Delphi Corporation
Troy, Michigan**

**File No. 33520-012
15 December 2006**

**HALEY &
ALDRICH**

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1. INTRODUCTION

Haley & Aldrich, Inc. (Haley & Aldrich) prepared this Current Conditions Summary (CCS) under the direction of Delphi Corporation, for their Delphi Flint East Wastewater Treatment Plant. The United States Environmental Protection Agency (U.S. EPA) ID Number for the Site is # MID980568570. The Site is located at 3026 Robert T. Longway Boulevard in Flint, Michigan (Figures 1 and 2). This CCS was prepared to aid Delphi in characterizing potential releases of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products at the Site.

The current environmental conditions at Delphi Corporation's Wastewater Treatment Plant ("Site") (Figure 1) were assessed by reviewing Site and regulatory agency files; interviewing site personnel; reviewing historic aerial photographs; and observing and documenting current conditions through several site visits. Through this process we identified 12 areas were identified where hazardous waste, hazardous constituents, hazardous substances and/or petroleum products were potentially treated, stored or disposed (released). These areas are identified as Areas of Interest (AOIs).

AOIs where a release of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products is known or is probable are recommended for further investigation. This information is summarized in the enclosed matrix of AOIs and corresponding figure (Table 1 and Figure 2).

2. FACILITY BACKGROUND

Delphi Flint East Wastewater Treatment is located at 3026 Robert T. Longway Boulevard in Flint, Genesee County, Michigan (Figure 1). The Site is approximately 5 acres with approximately 8,065-square feet of floor space. Buildings present at the Site include the Laboratory/Quality Control Building, the Filter Building, and several sheds. The Site also maintains several large detention basins and above ground tanks.

The Site was first developed in 1956 and has been used for process wastewater treatment since its inception. From 1956 until 1999, the Site was owned by various divisions of General Motors (GM). In January 1999, Delphi Automotive Systems separated from GM to form a new company. Later, the company was renamed Delphi Corporation. The Site currently operates as the Delphi Automotive Holdings Group Division of Delphi Corporation.

Past and current activities at the Site are:

- Process and treat wastewater
- Monitor stormwater

Based on a review of the site processes and activities, the general classes of chemicals that may have or are currently used at the Site or received in the waste stream from the Flint-East manufacturing facilities include;

- Petroleum products including various oils (quench, soluble, non-soluble, grinding, cutting, hydraulic, lubricating, gasoline, diesel).
- Acids
- Bases
- Metals including chromium, copper, nickel, zinc and cyanide.
- Semi-Volatile Organic Compounds
- Volatile Organic Compounds including chlorinated and non-chlorinated solvents.
- Polychlorinated Biphenyls (PCBs)
- Various Specialized compounds.

A summary of the general materials used at each AOI is included in Table 1.

Potable and combined sewer services are supplied by City of Flint municipal water supply. Process wastewater from the Flint East manufacturing plants is treated at the Site and is then discharged to Outfall 001.

Stormwater collected from Flint East manufacturing plants and the Site is discharged to Gilkey Creek (Outfall A-1). The outfall to Gilkey Creek is located along the southern property boundary of the Site and is approximately 100 feet south of the southern most storage tank. Gilkey Creek flows to the Flint River approximately 1.5 miles west of the Site.

The Site's EPA Generator ID Number is MID980568570. The Site operates as a RCRA "Large Quantity Generator" due to the generation of process wastewater treatment sludge. No other hazardous wastes are generated.

Previous subsurface investigations at the Site indicate that fill dirt is present beneath the Site from 0 to 4.5 feet below ground surface (bgs). Clay was encountered at 4.5 to 14.5 feet bgs. Saturated gray sand was observed from depths of 14.5 feet bgs to 20 feet bgs. This sand was silty and clayey in parts, grading to clay at 20 feet bgs. Water saturated soils were encountered from 14 feet to 16 feet bgs. This soil lithology is consistent with the Wisconsin Glacial drift, which outcrops in Genesee County.

The Quaternary Geology Map of Southern Michigan (Michigan Department of Natural Resources/MDNR, 1982) indicates that the Site overburden is comprised of gray to dark reddish brown lacustrine clay and silt. These unconsolidated strata typically underlie the flat, low-lying areas formerly inundated by the glacial Great Lakes. According to the Centennial Geological Map of the Southern Peninsula of Michigan (MDNR, 1936), the unconsolidated glacial sediments are underlain by bedrock of the Pennsylvanian Saginaw Series. The Series consists of the Upper and Lower Saginaw and Verne Limestone Formations. These are predominantly carbonate sedimentary units. The top of bedrock in the area is reported to be typically 100 to 150 feet below surface grade.

The upper unconsolidated glacial deposits beneath the Site represent the primary interest with respect to assessment of groundwater conditions. Based on Gilkey Creek and previous investigations at or near the Site, the water table is anticipated to be between 4 to 10 feet below ground surface. The direction of groundwater flow has not been confirmed.

Based on the regional and property topography, surface runoff in the vicinity of the Site drains generally to the south toward Gilkey Creek, which is situated along the Facilities' southern property boundary. Gilkey Creek is a perennial stream that flows toward the west where it joins the Flint River, approximately 1.5 miles west of the Site. The relationship of site groundwater and surface water has not been confirmed.

3. AREAS OF INTEREST

Areas of Interest are areas associated with the Site where evidence of past treatment, storage or disposal (or release) of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products is known or probable to have occurred. The AOIs identified during the preparation of this CCS are summarized in Table 1.

4. INFORMATION REVIEWED

To identify AOIs, Haley & Aldrich, Inc. reviewed Delphi's records of spills and releases, environmental sampling data, process descriptions and diagrams, and Site figures.

The following reports were also reviewed to identify potential AOIs:

Results of Investigation Waste Oil Tank, AC Rochester Flint East, Wastewater Treatment Plant dated October 1992, prepared by Environmental Consulting & Technology, Inc.

Site Assessment Report, AC Delco Systems Division, Wastewater Treatment Plant dated 25 October 1994, prepared by Techna Corporation.

A Site visit and interview with Alton Putney, Environmental Engineer was conducted on 2 August 2006. During the Site visit, Delphi personnel knowledgeable of current or past operations accompanied the Haley & Aldrich representative. Material Safety Data Sheets (MSDSs) for chemicals currently used in manufacturing and maintenance activities at the Site were obtained from Delphi Site personnel and reviewed for RCRA-regulated constituents and other hazardous substances.

Files maintained by the Michigan Department of Environmental Quality (MDEQ) Lansing District Office were accessed through a request submitted under the Freedom of Information Act. Additionally, an environmental database search was performed with an ASTM expanded radius of the Site. Sanborn fire insurance maps were requested but coverage was not available. Aerial photographs for 1941, 1950, 1964, 1972, 1982, 1992, and 1997 were also reviewed to identify potential environmental issues.

5. SELECTION CRITERIA FOR AOIS REQUIRING ADDITIONAL INVESTIGATION

As stated above, AOIs are areas associated with the Site where evidence of past treatment, storage or disposal of hazardous waste, hazardous constituents or petroleum products is known or probable to have occurred. The identification of AOIs retained for further investigation was based on the following:

1. Areas with a confirmed release to the environment.
2. Areas with a probable release based on visual evidence or interview with knowledgeable personnel.
3. Areas where a release to the environment is possible because a release pathway could not be ruled out. For example, where highly corrosive materials were used and impact of water discharging into sumps or trenches may have resulted in degradation of the integrity of that system and no evidence to the contrary was available, such systems were considered Areas of Interest warranting further investigation.
4. Areas with the likely presence of free product, regardless of its composition.

Any AOIs that were initially identified using the criteria set forth above were upon further inquiry eliminated from further investigation based on the following:

1. Areas where no release pathway to the environment was identified or no evidence of release was observed, documented, reported, or suspected.
2. Areas where, based on the volumes of materials managed, the potential for release was considered de minimis.

Based on the results of this study further investigation is recommended as detailed in Table 1. The details of the inspection and sampling program will be presented in a Field Investigation Work Plan.

6. CONCLUSIONS

AOIs have been identified by reviewing Delphi records, observing site conditions, and interviewing Delphi personnel with knowledge of current and historic site operations. Further investigation is recommended.

7. APPLICABLE ENVIRONMENTAL REGULATIONS

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Site is subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, and Part 201 of Michigan's Natural Resources and Environmental Protection Act (NREPA). These laws facilitate the remediation of abandoned waste sites. CERCLA places liability on responsible parties who 1) own a site where hazardous substances were disposed or abandoned, 2) previous owners at the time the hazardous substances were disposed or abandoned, 3) parties who contributed hazardous substances for disposal at the site, and 4) transporters of hazardous substances that select the site for disposal. The courts have interpreted CERCLA to impose liability for all responsible parties regardless of fault.

Under CERCLA, the USEPA has the power require responsible parties take a response action or to pay for such actions if the regulator takes action. The costs of this response action may include cleanup costs, enforcement costs, government oversight costs, and natural resources damages.

This Site is not currently undertaking a CERCLA or a Part 201 action.

Resource Conservation and Recovery Act of 1976 (RCRA)

The Resource Conservation and Recovery Act (RCRA) provides comprehensive federal regulation of hazardous wastes from point of generation to final disposal ("cradle to grave"). All generators of hazardous waste must comply with all the applicable requirements of the statute. Any facility that applied for or has interim status or is a permitted transporter, storage or disposal facility (TSDF) is subject to corrective action under RCRA at the entire facility.

Part 111 of NREPA, as amended, addresses the requirements for generators of hazardous wastes and certain Corrective Action sites in the State of Michigan.

The Michigan Delphi facilities are subject to Corrective Action requirements under RCRA or Part 111. The Site operates as a RCRA "Large Quantity Generator" which does not subject the site to Corrective Action. Based upon site documents, the Site did apply for an EPA Part A application in November 1980. A Site letter to the Michigan Department of Natural Resources (MDNR) dated 10 April 1989, requested that the Part A Permit be withdrawn due to the fact that Site, as a pre-treatment site that discharges to the City of Flint sanitary sewer, is excluded from RCRA permitting requirements. The letter, which was signed by the General Manager of the Flint East manufacturing plants, also certified that the Site never stored, transferred, treated, nor disposed any hazardous wastes. The MDNR responded in writing on 18 April 1989 stating that the site "is not subject to the licensing requirements of the federal Resource Conservation and Recovery Act or the Michigan Hazardous Waste Management Act. The Part A withdrawal is, therefore, approved."

Based on this information, it does not appear that the Site is subject to RCRA Corrective Action.

Clean Water Act

The Clean Water Act provides federal regulation of all sources of water pollution. The primary means of obtaining national water quality is through the National Pollutant Discharge Elimination System (NPDES) permits on all facilities that discharge pollutants into the waters of the United States. The Clean Water Act also establishes Ambient Water Quality Standards for the protection of human and ecological health.

Part 31 of NREPA as amended addresses the requirements for protection of surface water in the State of Michigan.

Although primarily administrative, this Delphi site may have requirements to eliminate NPDES discharges upon closure of the site.

Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act (TSCA) regulates the manufacture, processing, and distribution in commerce of chemical substances and mixtures capable of adversely affecting health or the environment. Regulations promulgated under TSCA contain requirements for the labeling, disposal, storage, spill response, cleanup criteria, and incineration of Polychlorinated Biphenyls (PCBs), among other substances.

The presence of PCBs at concentrations that have the potential to trigger TSCA requirements have not been detected in environmental media.

Michigan Natural Resources and Environmental Protection Act (NREPA)

Michigan Public Act 451 of 1994, as amended, is the Natural Resources and Environmental Protection Act (NREPA) and compiles environmental laws of the State of Michigan. Four parts of NREPA were identified that may apply to closure of the facility: Hazardous Waste Management (Part 111), Environmental Response (Part 201), Leaking Underground Storage Tanks (Part 213), and Water Resources Protection (Part 31).

Michigan Part 111 of NREPA. (Hazardous Waste Management)

Michigan Part 111 of NREPA (Part 111) is the Michigan State equivalence to RCRA. Michigan is a delegated state responsible for administration of hazardous waste management activities with the state. Part 111 is consistent with RCRA and regulates generators, transporters and disposal activities within Michigan.

Part 111 regulates waste management, the management and closure of accumulation tanks and areas (<90 day accumulation), and interim status of treatment and disposal units and the

management of satellite accumulation areas. Sites with regulated units can be subject to corrective action requirements for the entire facility under Part 111.

Under Part 111, RCRA-regulated units require certification of closure to assure that hazardous constituents have been removed. This requirement can require the removal of hazardous constituents to concentrations equal to or less than background concentrations ("Clean Closure") or to concentrations of hazardous constituents to levels protective of human-health and the environment. Closure of regulated units to levels protective of human-health and the environment can be achieved through the use of generic cleanup criteria.

Based on memorandum from Norman Niedergang, Director of Waste, Pesticides, and Toxics Division, (U.S. EPA Region V), to Jim Sygo, Chief of Waste Management Division, (Michigan DEQ), dated June 5, 1998 the U.S. EPA Region V acknowledged and recognized Michigan's intention to use the Part 201 Generic Cleanup Standards in the administration of the State's hazardous waste management program (Part 111), including the regulated unit closure and corrective action portions of the program at both licensed and interim status facilities. This understanding was limited to the use of Michigan Part 201 Generic Cleanup Criteria themselves and as they are utilized in the hazardous waste management program under Part 111. Michigan Part 201 (discussed below) does not affect Part 111.

A memorandum of understanding was signed between the U.S. EPA and Michigan DEQ in November 2000. Indicating that the U.S. EPA would generally not take lead action pursuant to RCRA Corrective Action at facilities being addressed by the MDEQ under Part 201 and 111 unless,

- "Region 5 determines that the site may pose an imminent and substantial endangerment to public health, welfare, or the environment;
- The facility owner or Operator fails to properly implement a course of action required by the MDEQ;
- The facility is subject to an existing federal (administrative or judicial) order for cleanup;
- The facility is listed on, or proposed for listing on, the USEPA's National Priorities List and sites where Region 5 has submitted a Hazard Ranking Scoring package to USEPA Headquarters, unless the site is eligible for a deferral under the RCRA/Comprehensive Environmental Response, Compensation, and Liability Act deferral policy dated July 1, 1995, EPA Doc. No. 540-R-95-002g;
- The exercise of federal authority is necessary for Region 5 to meet its legal responsibilities."

Based on site personnel interview and site document review, there are no known USTs remaining at the Site.

Part 201 of NREPA (Environmental Response)

The intent of Part 201 of NREPA (Part 201) is to protect the environment and natural resources, establish liability for environmental releases, regulate the response to the release of hazardous substances into the environment, waters, and provide for charges, fees, and penalties, and provide remedies. Part 201 provides means by which to eliminate liability

associated with the purchase of property with environmental contamination but establishes "Due Care" obligations associated with the property. Pertinent information from Part 201 that may be applicable to this Site include:

- Part 201 defines a "facility" as a location where a hazardous substance is present "in excess of the concentrations which satisfy the requirements of section 20120a(1)(a) or (17).
- Part 201 defines liable party based on causation for a release or purchase of property without performing a baseline environmental assessment.
- Part 201 establishes generic cleanup criteria (GCC) for applicable exposure pathways such as groundwater protection, surface water protection, inhalation, and direct contact. Generic criteria for these pathways were developed for multiple land use scenarios such as residential, commercial and industrial. These criteria (Michigan Part 201 Generic Cleanup Criteria (GCC)) are used in Section IV to determine if an area may be a "facility."
- Use of exposure barriers instead of remediation to generic criteria is allowed under Part 201.

Previous soil and groundwater chemical data were reviewed and compared to Part 201 GCC. Based on this review, the Site is classified as a facility and is thus subject to management of the site under Part 201 of Public Act 451 of 1994, as amended, of NREPA.

Part 213 of Public Act 451 of 1994 as amended (Leaking Underground Storage Tanks)

Part 213 of Public Act 451 of 1994, as amended, of NREPA (Part 213) addresses leaking underground storage tanks (LUSTs). Part 213 is intended to provide remedies for sites posing a threat to the public health, safety, or welfare and the environment caused by a release(s) of regulated substances from LUSTs.

Based on site personnel interview and site document review, there are no known LUSTs currently at the Site.

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TABLES

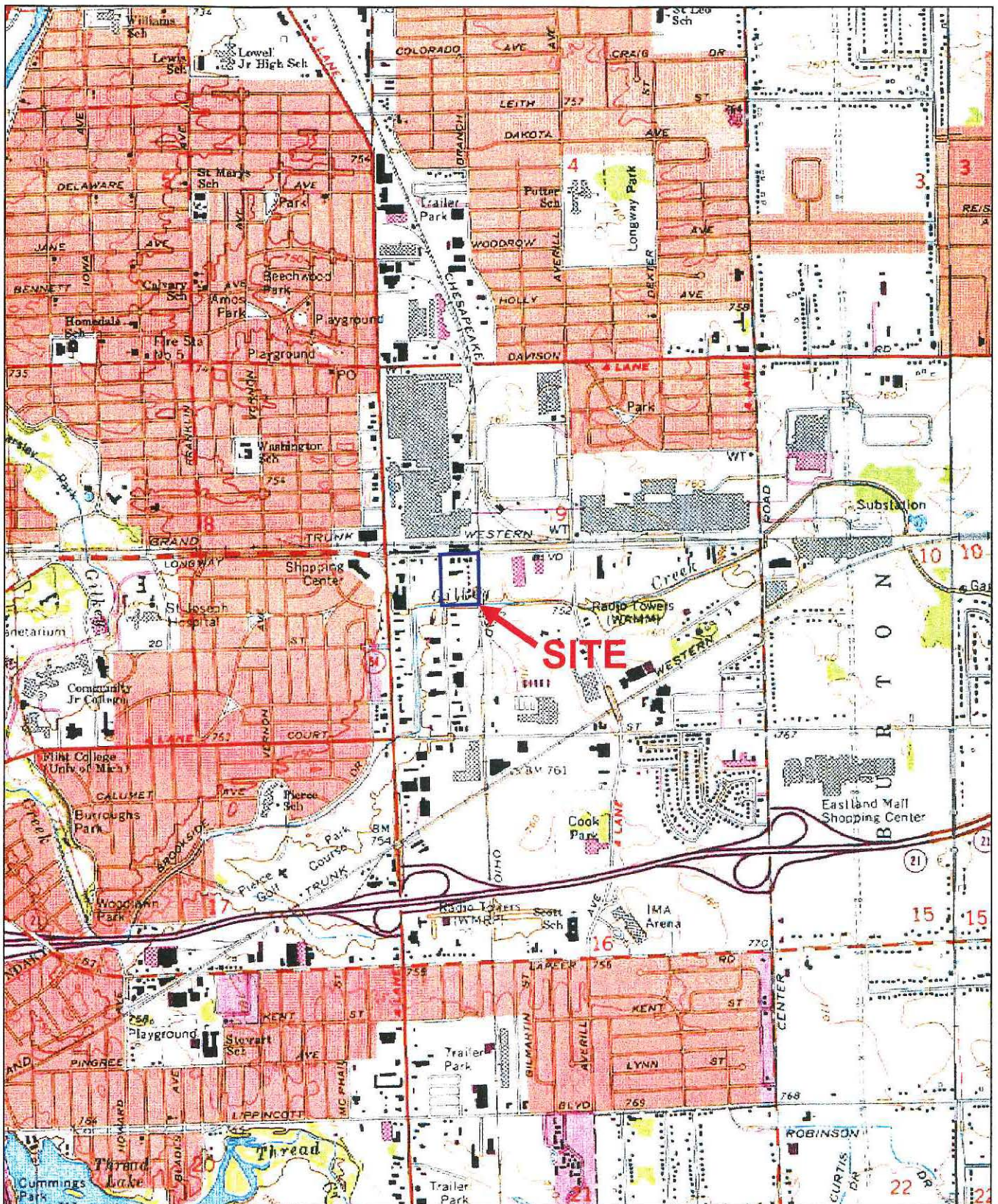
TABLE 1
SUMMARY OF AREAS OF INTEREST
FLINT-EAST, WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Area of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-01	Process Wastewater Sump	- Process Wastewater from Flint-East Operations	Sump in existence since inception of WWTP (1958). According to site personnel, during recent inspections sump was reportedly in deteriorated condition. Sump was then lined with stainless steel. As such, integrity of sump could not be assessed during site walk.	None	Yes	Active	-
AOI-02	Process Wastewater Basins	- Process Wastewater from Flint-East	Process Wastewater Basin used to blend incoming process wastewater prior to treatment. According to site personnel, the process wastewater basin has overflowed in the past. Amount of spills unknown.	None	Yes	Active	-
AOI-03	Cyclator Pit	- Final Process In Wastewater prior to discharge (clarified wastewater)	Cyclator Pit is used to clarify process wastewater and is the final step prior to discharging wastewater to outfall. The clarified wastewater is pumped into the Cyclator Pit then to Outfall 001 at Gilkey Creek.	None	No	Active	-
AOI-04	Former Used Oil UST	- Used Oil	Former 3,500 UST (#4042) used to store oil from oil separation process at WWTP. Upon removal of UST in 1990, soil sample were collected and analyzed for TPH. No regulatory closure documents were found.	Soil: TPH range = 240-6,700 mg/kg	Yes	Inactive, Removed 1990.	-
AOI-05	Used Oil AST	- Used Oil	This AST (#4047) was installed when the Former Used Oil UST (AOI-04) was removed. This 4,000 gallon AST (site records also indicate 5,500-gallon capacity) is located within a large concrete vault that is used as secondary containment. No staining or breaches were observed during the site visit.	None	No	Active	-
AOI-06	Sodium Hypochlorite and Ferrous Sulfate Storage Tanks (#4040 and #4041)	- Sodium Hypochlorite - Ferrous Sulfate	Tanks were removed in 1994 and replaced with ASTs. No evidence of leakage was noted during cleaning of tanks. Soil and groundwater samples collected during removal did not indicate any impact had occurred as a result of the former USTs.	Composite soil and groundwater samples were collected during excavation. Samples analyzed for pH, sodium, nickel, and iron. Sodium was above groundwater cleanup criteria. According to the Site Assessment Report prepared by ECT in October 1994, the sodium hypochlorite tank was structurally sound and passed the tightness test in January 1994. It was believed that the elevated sodium concentrations were due to deicing operations during winter months. Soils above the former USTs were unpaved and the grade in the area was known to slope towards the former USTs.	No	Inactive, USTs removed 1994 and replaced with ASTs.	-
AOI-07	Metal Bearings Shed	- Process Wastewater	Hydraulic pumps and sump are located in the Metal Bearings shed to support Metal Bearings Waste Tank. According to site personnel, pumps have leaked hydraulic oil during repair. During the site visit, some staining was observed on the concrete floor. However, concrete appeared to be in good condition.	None	No	Active	-
AOI-08	Metal Bearings Tanks	- Process Wastewater	Two, 300,000 gallon storage tanks located on south side of plant. No known issues or spills associated with storage tanks.	None	No	Active	-
AOI-09	Cyanide Waste Tanks	- Process Wastewater from Plant 400 Cyanide Lift Station	Two, 200,000 gallon storage tanks are no longer in operation. According to site personnel, several spills from tanks have occurred. Surface surrounding tanks is gravel. Investigation of this area will be captured under the groundwater investigation (AOI 12).	None	Included as part of groundwater investigation (AOI 12)	Inactive	-
AOI-10	Oil Storage	- New Oil	Approximately six, 25-gallon oil dispensing tanks are stored on a steel storage rack within the filter building for use of general maintenance. No secondary containment was observed around the steel rack. Some staining was observed beneath the dispensing tanks. Facility records also indicate an 800-gallon Used Oil AST (#4067) in the filter building. Surface in the area appeared to be in good condition.	None	No	Active	-
AOI-11	WWTP Stormwater Outfall	- Flint East stormwater	Outfall A-1 at Gilkey Creek is the final discharge point for Flint East process wastewater after treatment. In addition, during heavy rain events, pumps that divert stormwater to WWTP can shut down. The initial stormwater slug is captured but flow thereafter until pumps are reset is discharged directly to Gilkey Creek.	None	Yes	Active	-
AOI-12	Sitewide Groundwater		Sitewide groundwater is considered an AOI to allow more holistic approach to investigation.	None	Yes	N/A	-

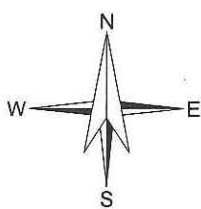
Notes

1. A PAVSI for WWTP does not appear to have been conducted.
2. The site-walks were conducted on 01 August 2008, 02 August 2008, and 22 August 2008.

FIGURES



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SITE COORDINATES: 43°01'29"N 83°39'03"W



U.S.G.S. QUADRANGLE: FLINT, MICHIGAN

HALEY & ALDRICH

DELPHI FLINT EAST WWTP FACILITY
3026 ROBERT T. LONGWAY BLVD
FLINT, MICHIGAN

PROJECT LOCUS

SCALE: 1:24000
AUGUST 2006

FIGURE 1

**FIELD INVESTIGATION REPORT
PROJECT DESTINY**

**DELPHI CORPORATION
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN**

US EPA ID #MID980568570

by

**Haley & Aldrich, Inc.
Cleveland, Ohio**

for

**Delphi Corporation
Troy, Michigan**

**File No.: 33520-012
4 January 2007
Revision 01**

**FIELD INVESTIGATION REPORT
PROJECT DESTINY**

**DELPHI CORPORATION
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
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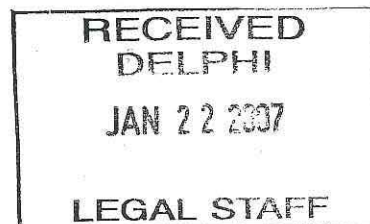


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5-2	Soil Sampling Results with DWP Screening
6	Sediment Sampling Results
7	Groundwater Elevation Contours (October 2006)

1. INTRODUCTION

Haley & Aldrich, Inc. (Haley & Aldrich) prepared this Field Investigation Report (FIR) under the direction of Delphi Corporation, for the Delphi Flint East Wastewater Treatment Plant. The United States Environmental Protection Agency (U.S. EPA) ID Number for this facility is # MID980568570. The Site is located at 3026 Robert T. Longway Boulevard in Flint, Michigan (Figures 1 and 2). This FIR was prepared to present the investigation of potential releases of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products at the Site.

Historical operations and the potential for a release to the environment at each Area of Interest (AOI) have been described in the Current Conditions Summary (CCS) (Haley & Aldrich Inc, December 2006). Based on the findings of the CCS, further investigation was warranted at five AOIs. Figure 2 illustrates the AOIs that were investigated.

2. FACILITY BACKGROUND

2.1 Site Setting

Delphi Flint East Wastewater Treatment is located at 3026 Robert T. Longway Boulevard in Flint, Genesee County, Michigan (Figure 1). The Site is approximately 5 acres with approximately 8,065-square feet of floor space. Buildings present at the Site include the Laboratory/Quality Control Building, the Filter Building, and several sheds. The Site also maintains several large detention basins and above ground tanks.

The Site was first developed in 1956 and has been used for process wastewater treatment since its inception. From 1956 until 1999, the Site was owned by various divisions of General Motors (GM). In January 1999, the Site became part of Delphi Automotive Systems when that company separated from GM. Later, the company was renamed Delphi Corporation. The Site currently operates as Delphi Automotive Holdings Group Division of Delphi Corporation.

2.2 Process Description and History

Past and current activities at the Site are:

- Process and treat wastewater
- Monitor stormwater

Based on a review of the site processes and activities, the general classes of chemicals that may have or are currently used at the Site or received in the waste stream from the Flint East manufacturing facilities include;

- Petroleum products including various oils (quench, soluble, non-soluble, grinding, cutting, hydraulic, lubricating, gasoline, diesel).
- Acids
- Bases
- Metals including chromium, copper, nickel, zinc and cyanide.
- Semi-Volatile Organic Compounds
- Volatile Organic Compounds including chlorinated and non-chlorinated solvents.
- Polychlorinated Biphenyls (PCBs)
- Various Specialized compounds.

The Site's EPA Generator ID Number is MID980568570. The Site operates as a RCRA "Large Quantity Generator" due to the generation of process wastewater treatment sludge. No other hazardous wastes are generated.

2.3 Surface Water/Water Supply

Potable and combined sewer services are supplied by City of Flint municipal water supply. Process wastewater from the Flint East manufacturing plants is treated at the Site and is then discharged to the City of Flint Sanitary Sewer at Outfall 001.

Stormwater collected from Flint East manufacturing plants and the Site is discharged to Gilkey Creek (Outfall A-1). The outfall to Gilkey Creek is located along the southern property boundary of the Site and is approximately 100 feet south of the southern most storage tank. Gilkey Creek flows to the Flint River approximately 1.5 miles west of the Site.

2.4 Geology/Hydrogeology

Previous and the most recent subsurface investigations at the Site indicate that fill is present beneath the Site and ranges in thickness from 4 to 12.5 feet. A clay and silt unit typically underlies the fill unit and ranges in thickness from 2.5 to 10 feet. This unit often contains thin lenses of saturated sand. Saturated gray sand is generally observed beneath the clay and silt unit from depths of 8.5 to 20 feet below ground surface (bgs). This sand is silty and clayey in parts, grading to a stiff gray silt between 12.5 and 20 feet bgs. Groundwater is generally encountered within the sand unit between 8.5 and 14 feet bgs. This soil lithology is consistent with the Wisconsin Glacial drift, which outcrops in Genesee County.

The Quaternary Geology Map of Southern Michigan (Michigan Department of Natural Resources/MDNR, 1982) indicates that the Site overburden is comprised of gray to dark reddish brown lacustrine clay and silt. These unconsolidated strata typically underlie the flat, low-lying areas formerly inundated by the glacial Great Lakes. According to the Centennial Geological Map of the Southern Peninsula of Michigan (MDNR, 1936), the unconsolidated glacial sediments are underlain by bedrock of the Pennsylvanian Saginaw Series. The Series consists of the Upper and Lower Saginaw and Verne Limestone Formations. These are predominantly carbonate sedimentary units. The top of bedrock in the area is reported to be typically 100 to 150 feet below surface grade.

Based on the regional and property topography, surface runoff in the vicinity of the Site drains generally to the south toward Gilkey Creek, which is situated along the Facilities' southern property boundary. Gilkey Creek is a perennial stream that flows toward the west where it joins the Flint River, approximately 1.5 miles west of the Site. To determine the relationship of site groundwater and surface water, static groundwater level measurements were collected in October 2006. Measured groundwater levels range from 6 to 9 feet bgs. These measurements were converted to groundwater elevations using surveyed well elevations. Figure 7 shows the groundwater elevation contours for October 2006. Based on these groundwater contours, groundwater is expected to flow to the southwest, towards Gilkey Creek.

3. FIELD INVESTIGATION OVERVIEW

The overall goal of the field investigation activities was to evaluate potential releases of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products at or from the Site which may pose an unacceptable risk to human health and the environment.

The investigation was designed to:

- Determine whether a release of hazardous waste/constituents/substances or petroleum products to soil, groundwater, surface water, or sediment has occurred at AOIs identified in the CCS as requiring investigation;
- Provide initial characterization of the source(s) of a release and provide initial estimates of the magnitude of the nature and extent of constituents in environmental media;
- Evaluate potential migration pathways, human and environmental receptors, and current and reasonably expected future land and groundwater uses;
- Provide initial assessment potential risk to human health and the environment associated with releases of constituents;

3.1 Scope of Work

The CCS identified five AOIs, as illustrated in Figure 2, where further investigation was warranted based on evidence of past release, historic operations, visual observations, file review results, or previous sampling results, if available. Table 1 summarizes the findings of the CCS. Table 2 summarizes the sampling and analysis where further investigation was conducted to characterize the potentially impacted media at these AOIs.

During the field investigation activities, modifications of the proposed field activities were made. These deviations from the Project Destiny Investigation Work Plan (Haley & Aldrich, October, 2006) are listed below:

- Groundwater grab samples were proposed to be collected from two borings in AOI-1. Refusal was encountered at both borings before water was encountered. As such no borehole water was collected.

The field investigation activities were conducted from 4 October 2006 through 17 October 2006. Field investigation activities included the following:

- Collection of soil samples from three AOIs;
- Collection of sediment samples from one AOI;
- Installation of four monitoring wells;
- Collection of groundwater level measurements in new wells; and
- Collection of groundwater samples from the new monitoring wells.

A total of 33 soil samples, four groundwater samples, and six sediment samples were collected as part of this field investigation phase. Sampling locations are shown in Figure 3.

Copies of boring logs for subsurface drilling activities are provided in Appendix A. Analytical results for soil, groundwater and sediment are provided in Tables 4-1, 4-2 and 4-3, respectively. Figures summarizing the results are also attached.

Sampling was conducted in accordance with standard protocols, as detailed in the Project Destiny Investigation Work Plan and Quality Assurance Project Plan (QAPP) (Haley & Aldrich, Inc., October 2006) and the Michigan Department of Environmental Protection (MDEQ) Remediation and Response Division (RRD) Operational Memorandum #2, *Sampling and Analysis Guidance* (October 2004). Stearns Drilling Inc. (Stearns), of Dutton, Michigan performed the Geoprobe® soil borings using a track mounted Geoprobe® rig, which advanced dedicated four foot acetate sleeves. Monitoring wells were installed by Stearns using a hollow stem auger rig. All drilling activities were conducted under the supervision of Haley & Aldrich personnel. All samples collected were transmitted to Severn Trent Laboratories (STL) of North Canton, Ohio for subsequent chemical analysis.

3.2 Quality Assurance

STL of North Canton, Ohio analyzed the samples. During the implementation of the field investigation, quality assurance/quality control (QA/QC) samples including trip blanks, field blanks and duplicate samples were collected. Duplicate samples were collected at a minimum rate of one duplicate sample for every 10 soil and groundwater samples collected. A total of four soil, two groundwater, and one sediment duplicate samples were collected. Four trip and three equipment duplicates were collected to monitor for contamination of the samples in the field and during transport between the Site and laboratory. Analytical results associated with QA/QC samples are summarized in Table 5. The analytical laboratory reports are available upon request. Data validation was not complete at the time of this report.

4. APPLICABLE CRITERIA

The characterization data collected during field investigation activities were evaluated to identify environmental conditions that may warrant further investigation or require remedial action. The screening criteria used for the evaluation of Site data are risk-based cleanup criteria developed under the Michigan Part 201 Rules, and Part 201 criteria that are adapted to site-specific factors. A concentration higher than the screening level does not mean that a significant risk exists. Rather, the concentration is identified for further review relative to:

- Concentrations of the constituent at other locations and depths
- Distribution of the constituent in other environmental media
- Background levels
- Field observations
- Previously identified or additional areas of interest (based on operational history in the vicinity of the sample location)

Field duplicate or replicate analyses were screened individually for the purposes of evaluating the need for further fieldwork and are presented on the summary tables and databox figures, attached.

4.1 Soil Screening

Soil analysis results were screened against the following Michigan Part 201 of Public Act 451 of 1994, as amended, of NREPA Generic Cleanup Criteria (GCC) (December 2004):

- Residential Direct Contact
- Industrial/Commercial II Direct Contact
- Infinite source volatilization to ambient air (Residential – Industrial only if above residential)
- Soil particulate inhalation (Residential – Industrial only if above residential)
- Soil Volatilization to Indoor Air (Residential and Industrial)
- Soil Leaching to Groundwater – Residential Drinking Water Protection
- Soil Saturation Limits

4.1.1 Evaluation of Naturally Occurring Inorganic Constituents in Soil

Background concentrations for naturally occurring inorganic constituents were evaluated using Flint-East site specific background concentrations developed during the Plant 400 RFI activities. These concentrations are summarized in Table 4-1.

4.2 Groundwater Screening

Groundwater analysis results were compared to the following Michigan Part 201 of Public Act 451 of 1994, as amended, of NREPA Generic Cleanup Criteria (GCC) (December 2004):

- Residential Drinking Water
- Groundwater Surface Water Interface

- Residential and Commercial I Groundwater Volatilization to Indoor Air
- Groundwater Contact
- Water Solubility

4.3 Sediment Screening

Sediment analytical results were compared to generic sediment screening criteria. The criteria were compiled from a hierarchy of the following sources:

- Consensus-based Freshwater Sediment Quality Guidelines, EPA, 2000 (EPA 905/R-00/007).
- EcoTox Thresholds, Sediment Quality Criteria or Benchmarks, EPA, 1996 (EPA 540/F-95/038).
- Effects-Range Low, Long et al., 1995.
- Threshold effects Level, Canadian Council of Ministers of the Environment, 1998.

5. RESULTS

AOIs were identified as requiring further investigation during the CCS phase. A summary of the investigation activities is presented in Table 2. The findings of the investigation are presented in Table 3. Analytical results are summarized in Tables 4-1 through 4-3. Figure 2 illustrates the locations of the AOIs that required investigation. Sampling locations are shown in Figure 3. Soil and groundwater sampling results are shown in Figures 4, 5, and 5-1.

6. SUMMARY

Five AOIs were investigated at the site by collecting soil, groundwater and/or sediment samples. Data collected were compared to published risk-based screening criteria. Based on initial screening of the data collected during the field investigation activities, further evaluation of the following is warranted:

- Sitewide arsenic in soil,
- Ecological risk of PAHs in sediment in Gilkey Creek.
- Arsenic in groundwater near MW-8001
- Cyanide in groundwater near MW-8002

Further evaluation could include additional sampling to refine understanding of the nature and extent of the constituents detected, site specific risk assessment, further evaluation of naturally-occurring/background levels or consideration of remedial action.

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TABLE 1
SUMMARY OF AREAS OF INTEREST
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-01	Process Wastewater Sump	- Process Wastewater from Flint-East Operations	Sump in existence since inception of WWTP (1956). According to site personnel, during recent inspections sump was reportedly in deteriorated condition. Sump was then lined with stainless steel. As such, integrity of sump could not be assessed during site walk.	None	Yes	Active	-
AOI-02	Process Wastewater Basins	- Process Wastewater from Flint East	Process Wastewater Basin used to blend incoming process wastewater prior to treatment. According to site personnel, the process wastewater basin has overflowed in the past. Amount of spills unknown.	None	Yes	Active	-
AOI-03	Cyclator Pit	- Final Process in Wastewater prior to discharge (clarified wastewater)	Cyclator Pit is used to clarify process wastewater and is the final step prior to discharging wastewater to outfall. The clarified wastewater is pumped into the Cyclator Pit then to Outfall 001 at Gilkey Creek.	None	No	Active	-
AOI-04	Former Used Oil UST	- Used Oil	Former 3,500 UST (#4042) used to store oil from oil separation process at WWTP. Upon removal of UST in 1990, soil sample were collected and analyzed for TPH. No regulatory closure documents were found.	Soil: TPH range = 240-6,700 mg/kg	Yes	Inactive. Removed 1990.	-
AOI-05	Used Oil AST	- Used Oil	This AST (#4047) was installed when the Former Used Oil UST (AOI-04) was removed. This 4,000 gallon AST (site records also indicate 5,500-gallon capacity) is located within a large concrete vault that is used as secondary containment. No staining or breaches were observed during the site visit.	None	No	Active	-
AOI-06	Sodium Hypochlorite and Ferrous Sulfate Storage Tanks (#4040 and #4041)	- Sodium Hypochlorite - Ferrous Sulfate	Tanks were removed in 1994 and replaced with ASTs. No evidence of leakage was noted during cleaning of tanks. Soil and groundwater samples collected during removal did not indicate any impact had occurred as a result of the former USTs.	Composite soil and groundwater samples were collected during excavation. Samples analyzed for pH, sodium, nickel, and iron. Sodium was above groundwater cleanup criteria. According to the Site Assessment Report prepared by ECT in October 1994, the sodium hypochlorite tank was structurally sound and passed the tightness test in January 1994. It was believed that the elevated sodium concentrations were due to deicing operations during winter months. Soils above the former USTs were unpaved and the grade in the area was known to slope towards the former USTs.	No	Inactive. USTs removed 1994 and replaced with ASTs.	-
AOI-07	Metal Bearings Shed	- Process wastewater	Hydraulic pumps and sump are located in the Metal Bearings shed to support Metal Bearings Waste Tank. According to site personnel, pumps have leaked hydraulic oil during repair. During the site visit, some staining was observed on the concrete floor. However, concrete appeared to be in good condition.	None	No	Active	-
AOI-08	Metal Bearings Tanks	- Process Wastewater	Two, 300,000 gallon storage tanks located on south side of plant. No known issues or spills associated with storage tanks.	None	No	Active	-
AOI-09	Cyanide Waste Tanks	- Process Wastewater from Plant 400 Cyanide Lift Station	Two, 200,000 gallon storage tanks are no longer in operation. According to site personnel, several spills from tanks have occurred. Surface surrounding tanks is gravel. Investigation of this area will be captured under the groundwater investigation (AOI 12).	None	Included as part of groundwater investigation (AOI 12)	Inactive	-
AOI-10	Oil Storage	- New Oil	Approximately six, 25-gallon oil dispensing tanks are stored on a steel storage rack within the filter building for use of general maintenance. No secondary containment was observed around the steel rack. Some staining was observed beneath the dispensing tanks. Facility records also indicate an 800-gallon Used Oil AST (#4067) in the filter building. Surface in the area appeared to be in good condition.	None	No	Active	-

TABLE 1
SUMMARY OF AREAS OF INTEREST
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-11	WWTP Stormwater Outfall	- Flint East stormwater	Outfall A-1 at Gilkey Creek is the final discharge point for Flint East process wastewater after treatment. In addition, during heavy rain events, pumps that divert stormwater to WWTP can shut down. The initial stormwater slug is captured but flow thereafter until pumps are reset is discharged directly to Gilkey Creek.	None	Yes	Active	-
AOI-12	Sitewide Groundwater		Sitewide groundwater is considered an AOI to allow more holistic approach to investigation.	None	Yes	N/A	-

- Notes
1. A PA/VSI for WWTP does not appear to have been conducted.
 2. The site-walks were conducted on 01 August 2006, 02 August 2006, and 22 August 2006.

TABLE 2
 SAMPLING AND ANALYSIS TABLE
 DELPHI AUTOMOTIVE HOLDINGS GROUP
 DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
 FLINT, MICHIGAN

Areas of Interest	AOI Description	Investigation Purpose	Field Investigation	Maximum Number of Groundwater Samples	Maximum Number of Soil Samples	Analytical Investigation ¹
AOI-01	Process Wastewater Sump	Evaluate if material has been released to the adjacent soil or groundwater near the sumps. Due to depth of sump, groundwater grab samples are recommended.	Installed 2 borings. Collected soil samples.	-	6	TCL VOCs TCL SVOCs TAL Metals TCL PCBs
AOI-02	Process Wastewater Basins	Evaluate if material has been released to the adjacent soil near basin.	Installed 6 borings. Collected soil samples.	-	18	TCL VOCs TCL SVOCs TAL Metals TCL PCBs
AOI-04	Former Used Oil UST	Evaluate soil conditions near former used oil UST.	Installed 3 soil borings. Collected soil samples.	-	9	TCL VOCs TCL SVOCs TAL Metals TCL PCBs
AOI-11	WWTP Outfall	Evaluate if impacted stormwater has been released to the outfall.	Collected 6 sediment samples. Three from downstream of outfall and three from upstream.	-	6	TCL VOCs TCL SVOCs TAL Metals TCL PCBs
AOI-12	Sitewide Groundwater	Evaluate if sitewide groundwater has been impacted as a result of activities at the plant.	Installed 4 monitoring wells. Collected groundwater samples.	4	-	TCL VOCs TAL Metals

Notes:

1. Full suite analysis of one sample, biasly chosen, per AOI was conducted.

TABLE 3
SUMMARY OF FINDINGS
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Areas of Interest	AOI Description	Soil		Groundwater		Sediment		Comments
		Constituent/Group of Constituents Exceeded	Criteria Exceeded	Constituent/Group of Constituents Exceeded	Criteria Exceeded ¹	Constituent/Group of Constituents Exceeded	Criteria Exceeded ²	
AOI-01	Process Wastewater Sump	Arsenic	Residential Direct Contact	-	-	-	-	Consider potential background arsenic in sitewide soil
		Cobalt, Manganese	Drinking Water Protection					
AOI-02	Process Wastewater Basins	Arsenic	Residential Direct Contact	-	-	-	-	
		Cobalt, Manganese	Drinking Water Protection					
AOI-04	Former Used Oil UST	Arsenic	Residential Direct Contact	-	-	-	-	
AOI-11	WWTP Outfall	-	-	-	-	PAHs	Generic Sediment Screening Criteria	Evaluate PAHs in sediment
AOI-12	Sitewide Groundwater	-	-	Arsenic, Lead, Manganese, Thallium, Vanadium	Residential Drinking Water	-	-	Evaluate Cn near MW-8002 Evaluate As near MW-8001
				Cyanide (total), Thallium, Vanadium	Groundwater to Surface Water Interface			

Notes

1. Soil and Groundwater screened against Michigan Part 201 Generic Screening Criteria
2. Sediment screened against Generic Sediment Screening

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	Background	Residential Direct Contact (Part 201)/(PRGs)*	Industrial Direct Contact (Part 201)	Residential Volatilization to Indoor Air (Part 201)	Industrial Volatilization to Indoor Air (Part 201)	Residential Volatilization to Ambient Air (Part 201)	Saturation Limit (Part 201)	Residential Particulate Inhalation (Part 201)	Drinking Water Protection (Part 201)	AOI-01 GP-8001 10/17/2006 0 - 2 ft N	AOI-01 GP-8001 10/17/2006 4 - 6 ft N	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft FD	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft N	AOI-01 GP-8002 10/16/2006 0 - 2 ft N
Metals (mg/kg)														
Antimony	-	180	670	-	-	-	-	13000	4.3	0.66	1.1	1.8	1.3	0.66
Arsenic	6.8	7.6	37	-	-	-	-	720	23	6.4	8.2 ^(M)	16.9 ^(M)	15.7 ^(M)	8.1 ^(M)
Barium	-	37000	130000	-	-	-	-	330000	1300	17.2	138	268	279	76.8
Beryllium	-	410	1600	-	-	-	-	1300	51	ND (0.17)	0.72	0.66	0.6	0.39
Cadmium	-	550	2100	-	-	-	-	1700	6	0.068 B	0.17	0.15	0.13	0.3
Chromium	-	-	-	-	-	-	-	-	-	19.9	19.4	23.4	20.3	17.1
Cobalt	5.8	2600	9000	-	-	-	-	13000	0.8	6 ^(M)	10.9 ^(M)	18.7 ^(M)	17.7 ^(M)	7.8 ^(M)
Copper	-	20000	73000	-	-	-	-	130000	5800	13	14.7	12.1	11.1	15.2
Cyanide (total)	-	12	250	-	-	-	-	250	4	ND (0.54)	ND (0.64)	ND (0.61)	ND (0.60)	ND (0.61)
Lead	-	400	900	-	-	-	-	100000	700	12.9	14.6	12.2	11.2	13.3
Manganese	521	25000	90000	-	-	-	-	3300	1	96.6 J ^(M)	487 J ^(M)	3230 J ^(M)	2690 J ^(M)	346 J ^(M)
Mercury	-	160	580	48	89	52	-	20000	1.7	0.018 B	0.084 B	0.047 B	0.061 B	0.052 B
Nickel	-	40000	150000	-	-	-	-	13000	100	10.1	22.6	30.6	28.3	21
Selenium	-	2600	9600	-	-	-	-	130000	4	ND (0.43)	ND (0.51)	ND (0.49)	ND (0.48)	0.51
Silver	-	-	-	-	-	-	-	-	-	ND (0.43)	ND (0.51)	ND (0.49)	ND (0.48)	ND (0.49)
Thallium	0.93	35	130	-	-	-	-	-	2.3	ND (0.86)	2.1	7.7 ^(M)	7 ^(M)	ND (0.98)
Vanadium	-	750	5500	-	-	-	-	-	72	7.3	26.8	37	30.3	22.5
Zinc	-	170000	630000	-	-	-	-	-	2400	33.7 J	99.2 J	90.4 J	82.7 J	60.9
PCBs (ug/kg)														
Aroclor-1016	-	-	-	-	-	-	-	-	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Aroclor-1221	-	-	-	-	-	-	-	-	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Aroclor-1232	-	-	-	-	-	-	-	-	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Aroclor-1242	-	-	-	-	-	-	-	-	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Aroclor-1248	-	1100	7400	3000000	16000000	240000	-	5200000	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Aroclor-1254	-	1100	7400	3000000	16000000	240000	-	5200000	-	ND (36)	ND (42)	ND (40)	ND (40)	29 J
Aroclor-1260	-	1100	7400	3000000	16000000	240000	-	5200000	-	ND (36)	ND (42)	ND (40)	ND (40)	ND (40)
Semi-Volatile Organic Compounds (ug/kg)														
2,2-oxybis(1-Chloropropane)	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4,5-Trichlorophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4,6-Trichlorophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4-Dichlorophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4-Dimethylphenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4-Dinitrophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2,4-Dinitrotoluene	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
2,6-Dinitrotoluene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2-Chloronaphthalene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2-Chlorophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2-Methyl naphthalene	-	8100000	26000000	-	-	-	-	-	57000	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2-Methylphenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
2-Nitroaniline	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
2-Nitrophenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
3,3-Dichlorobenzidine	-	-	-	-	-	-	-	-	-	ND (1700)	ND (2000)	ND (1900)	ND (1900)	ND (7800)
3-Nitroaniline	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
4,6-Dinitro-2-methylphenol	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
4-Chloro-3-methylphenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	Background	Residential Direct Contact (Part 201)/(PRGs)*	Industrial Direct Contact (Part 201)	Residential Volatilization to Indoor Air (Part 201)	Industrial Volatilization to Indoor Air (Part 201)	Residential Volatilization to Ambient Air (Part 201)	Saturation Limit (Part 201)	Residential Particulate Inhalation (Part 201)	Drinking Water Protection (Part 201)	AOI-01 GP-8001 10/17/2006 0 - 2 ft N	AOI-01 GP-8001 10/17/2006 4 - 6 ft N	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft FD	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft N	AOI-01 GP-8002 10/16/2006 0 - 2 ft N
Semi-Volatile Organic Compounds (ug/kg) (continued)														
4-Chloroaniline	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
4-Methylphenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
4-Nitroaniline	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
4-Nitrophenol	-	-	-	-	-	-	-	-	-	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (6700)
Acenaphthene	-	41000000	130000000	190000000	350000000	81000000	-	14000000000	300000	ND (280)	ND (340)	ND (320)	ND (320)	170 J
Acenaphthylene	-	1600000	5200000	1600000	3000000	2200000	-	23000000000	5900	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Acetophenone	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Anthracene	-	230000000	730000000	1000000000	1000000000	1400000000	-	67000000000	41000	ND (280)	ND (340)	ND (320)	ND (320)	560 J
Atrazine	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Benzaldehyde	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Benzo(a)anthracene	-	20000	80000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	1500
Benzo(a)pyrene	-	2000	8000	-	-	-	-	1500000	-	ND (280)	ND (340)	ND (320)	ND (320)	1300
Benzo(b)fluoranthene	-	20000	80000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	1800
Benzo(g,h,i)perylene	-	2500000	7000000	-	-	-	-	8000000000	-	ND (280)	ND (340)	ND (320)	ND (320)	860 J
Benzo(k)fluoranthene	-	200000	800000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	770 J
Biphenyl	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
bis(2-Chloroethoxy)methane	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
bis(2-Chloroethyl)ether	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
bis(2-Ethylhexyl)phthalate	-	2800000	10000000	-	-	-	10000000	700000000	-	27 J	36 J	48 J	34 J	160 J B
Butyl benzylphthalate	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Caprolactam	-	53000000	310000000	-	-	-	-	670000000	120000	ND (280)	ND (340)	ND (320)	ND (320)	200 J
Carbazole	-	530000	2400000	-	-	-	-	-	9400	ND (280)	ND (340)	ND (320)	ND (320)	490 J
Chrysene	-	2000000	8000000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	1700
Dibenzo(a,h)anthracene	-	2000	8000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	180 J
Dibenzofuran	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Diethyl phthalate	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Dimethyl phthalate	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Di-n-butylphthalate	-	760000	760000	-	-	-	760000	3300000000	760000	92 J	ND (340)	100 J	ND (320)	ND (1300)
Di-n-octyl phthalate	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Fluoranthene	-	46000000	130000000	1000000000	1000000000	740000000	-	9300000000	730000	ND (280)	ND (340)	ND (320)	ND (320)	4100
Fluorene	-	27000000	87000000	580000000	1000000000	130000000	-	9300000000	390000	ND (280)	ND (340)	ND (320)	ND (320)	190 J
Hexachlorobenzene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Hexachlorobutadiene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Hexachlorocyclopentadiene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Hexachloroethane	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Indeno(1,2,3-cd)pyrene	-	20000	80000	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	840 J
Isophorone	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Naphthalene	-	16000000	52000000	250000	470000	300000	-	200000000	35000	ND (280)	ND (340)	ND (320)	ND (320)	87 J
Nitrobenzene	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
N-Nitrosodi-n-propylamine	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
N-Nitrosodiphenylamine	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Pentachlorophenol	-	-	-	-	-	-	-	-	-	ND (360)	ND (420)	ND (400)	ND (400)	ND (1600)
Phenanthrene	-	1600000	5200000	2800000	5100000	160000	-	6700000	56000	ND (280)	ND (340)	ND (320)	ND (320)	2600
Phenol	-	-	-	-	-	-	-	-	-	ND (280)	ND (340)	ND (320)	ND (320)	ND (1300)
Pyrene	-	29000000	84000000	1000000000	1000000000	650000000	-	6700000000	480000	ND (280)	ND (340)	ND (320)	ND (320)	2900

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	Background	Residential Direct Contact (Part 201)/(PRGs)*	Industrial Direct Contact (Part 201)	Residential Volatilization to Indoor Air (Part 201)	Industrial Volatilization to Indoor Air (Part 201)	Residential Volatilization to Ambient Air (Part 201)	Saturation Limit (Part 201)	Residential Particulate Inhalation (Part 201)	Drinking Water Protection (Part 201)	AOI-01 GP-8001 10/17/2006 0 - 2 ft N	AOI-01 GP-8001 10/17/2006 4 - 6 ft N	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft FD	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft N	AOI-01 GP-8002 10/16/2006 0 - 2 ft N
Total Solids (%)														
Total Solids	-	-	-	-	-	-	-	-	-	92.8	78.2	82.3	83.4	81.6
Volatile Organic Compounds (ug/kg)														
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
1,1,2-Trichloroethane	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,2,4-Trichlorobenzene	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
1,2-Dibromoethane	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
1,2-Dichlorobenzene	-	210000	210000	210000	210000	39000000	210000	1E+11	14000	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,2-Dichloropropane	-	140000	550000	4000	7400	25000	550000	270000000	100	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
1,3-Dichlorobenzene	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
1,4-Dichlorobenzene	-	400000	1900000	19000	100000	77000	-	450000000	1700	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
2-Butanone	-	-	-	-	-	-	-	-	-	ND (710)	ND (720)	ND (730)	ND (670)	ND (740)
2-Hexanone	-	-	-	-	-	-	-	-	-	ND (2400)	ND (2400)	ND (2400)	ND (2200)	ND (2500)
4-Methyl-2-pentanone	-	2700000	2700000	2700000	2700000	45000000	2700000	1.4E+11	36000	ND (2400)	ND (2400)	ND (2400)	ND (2200)	ND (2500)
Acetone	-	23000000	73000000	110000000	110000000	130000000	110000000	3.9E+11	15000	780 B	780 B	690 J B	690 B	720 J B
Benzene	-	180000	400000	1600	8400	13000	400000	380000000	100	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Bromodichloromethane	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
Bromoform	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
Bromomethane	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Carbon disulfide	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Carbon tetrachloride	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Chlorobenzene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Chloroethane	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Chloroform	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Chloromethane	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
cis-1,2-Dichloroethene	-	640000	640000	22000	41000	180000	640000	2300000000	1400	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
cis-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Cyclohexane	-	-	-	-	-	-	-	-	-	ND (1100)	ND (1200)	ND (1200)	ND (1100)	ND (1200)
Dibromochloromethane	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Dichlorodifluoromethane (CFC-12)	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)
Ethylbenzene	-	140000	140000	87000	140000	720000	140000	10000000000	1500	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Isopropylbenzene	-	390000	390000	390000	390000	1700000	390000	5800000000	91000	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Methyl acetate	-	-	-	-	-	-	-	-	-	410 J B	520 J B	420 J B	350 J B	350 J B
Methyl cyclohexane	-	-	-	-	-	-	-	-	-	ND (1100)	18 J	9.1 J	ND (1100)	14 J
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Methylene chloride	-	-	-	-	-	-	-	-	-	ND (120)	ND (120)	ND (120)	ND (110)	ND (120)
Styrene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Tetrachloroethene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Toluene	-	250000	250000	250000	250000	2800000	250000	27000000000	16000	ND (95)	ND (96)	ND (97)	ND (89)	12 J
trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
trans-1,3-Dichloropropene	-	-	-	-	-	-	-	-	-	ND (47)	ND (48)	ND (49)	ND (45)	ND (49)
Trichloroethene	-	500000	500000	7100	37000	78000	500000	1800000000	100	ND (47)	ND (48)	ND (49)	ND (45)	20 J
Trichlorofluoromethane (CFC-11)	-	-	-	-	-	-	-	-	-	ND (95)	ND (96)	ND (97)	ND (89)	ND (98)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	Background	Residential Direct Contact (Part 201)/(PRGs)*	Industrial Direct Contact (Part 201)	Residential Volatilization to Indoor Air (Part 201)	Industrial Volatilization to Indoor Air (Part 201)	Residential Volatilization to Ambient Air (Part 201)	Saturation Limit (Part 201)	Residential Particulate Inhalation (Part 201)	Drinking Water Protection (Part 201)	AOI-01 GP-8001 10/17/2006 0 - 2 ft N	AOI-01 GP-8001 10/17/2006 4 - 6 ft N	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft FD	AOI-01 GP-8001 10/17/2006 6 - 7.7 ft N	AOI-01 GP-8002 10/16/2006 0 - 2 ft N
Volatile Organic Compounds (ug/kg) (continued)														
Trifluorotrichloroethane (Freon 113)	-	-	-	-	-	-	-	-	-	ND (240)	ND (240)	ND (240)	ND (220)	ND (250)
Vinyl chloride	-	-	-	-	-	-	-	-	-	ND (59)	ND (60)	ND (61)	ND (56)	ND (61)
Xylenes (total)	-	150000	150000	150000	150000	46000000	150000	2.9E+11	5600	ND (140)	ND (140)	ND (150)	ND (130)	21 J

Notes and Abbreviations:

- 1. Criteria presented are available generic criteria for detected compounds only.
 - A: Indicates result is greater than Residential Direct Contact (Part 201)
 - B: Indicates result is greater than Industrial Direct Contact (Part 201)
 - C: Indicates result is greater than Residential Volatilization to Indoor Air (Part 201)
 - D: Indicates result is greater than Industrial Volatilization to Indoor Air (Part 201)
 - E: Indicates result is greater than Residential Volatilization to Ambient Air (Part 201)
 - F: Indicates result is greater than Saturation Limit (Part 201)
 - G: Indicates result is greater than Residential Particulate Inhalation (Part 201)
 - H: Indicates result is greater than Drinking Water Protection (Part 201)
- 2. ND (#): Compound not detected above the indicated reporting limit.
- 3. Results flagged red exceed criteria.
- 4. Metals below the background criteria are not flagged red.
Background criteria only shown for chemicals with exceedances.

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	AOI-01 GP-8002 10/16/2006 4 - 6 ft FD	AOI-01 GP-8002 10/16/2006 4 - 6 ft N	AOI-01 GP-8002 10/16/2006 8 - 9.8 ft N	AOI-02 GP-8003 10/16/2006 0 - 2 ft N	AOI-02 GP-8003 10/16/2006 4 - 6 ft N	AOI-02 GP-8003 10/16/2006 8 - 10 ft N	AOI-02 GP-8004 10/16/2006 0 - 2 ft N	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft FD	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft N	AOI-02 GP-8004 10/16/2006 6 - 8 ft N	AOI-02 GP-8005 10/16/2006 0 - 2 ft N	AOI-02 GP-8005 10/16/2006 4 - 6 ft N	AOI-02 GP-8005 10/16/2006 6 - 8 ft N	AOI-02 GP-8006 10/17/2006 0 - 2 ft N	AOI-02 GP-8006 10/17/2006 12 - 14 ft FD
Metals (mg/kg)															
Antimony	0.58 B	0.81	0.57 B	0.82	0.60 B	ND (0.59)	0.64	0.71	0.76	0.68	0.6	0.54 B	0.65	0.75	0.75
Arsenic	11 ^[A]	17.3 ^[A]	10.4 ^[A]	8.7 ^[A]	9 ^[A]	6	8.5 ^[A]	10.3 ^[A]	6.5	9.2 ^[A]	7.1	8.5 ^[A]	10.8 ^[A]	9.3 ^[A]	8.1 ^[A]
Barium	80.4	95.3	83.4	69.7	87.9	44.3	61.6	82.5	95.4	103	48	80.6	76.9	74.1	48
Beryllium	0.36	0.43	0.32	0.47	0.46	0.22	0.32	0.38	0.45	0.4	0.23	0.36	0.32	0.37	0.26
Cadmium	0.58	0.36	0.23	0.29	0.23	0.14	0.25	0.26	0.19	0.23	0.57	0.23	0.3	0.074 B	ND (0.090)
Chromium	14.8	15.9	14.1	23.6	17.9	11.7	14.3	18.5	18.9	16.7	37.9	16.5	14.1	18.7	14.8
Cobalt	10.7 ^[H]	8.4 ^[H]	9.1 ^[H]	10.9 ^[H]	8.8 ^[H]	5.6 ^[H]	5.8 ^[H]	7.8 ^[H]	8.4 ^[H]	9.5 ^[H]	4.7 ^[H]	7.9 ^[H]	7.9 ^[H]	7.3 ^[H]	8.6 ^[H]
Copper	16	15.3	15.8	19.3	16.1	13.5	16	15.8	14	14.5	28.5	15.3	14.9	17.1	14.4
Cyanide (total)	ND (0.62)	ND (0.62)	ND (0.61)	ND (0.62)	ND (0.63)	ND (0.59)	ND (0.61)	ND (0.62)	ND (0.63)	0.85	0.19 B	ND (0.63)	ND (0.61)	ND (0.63)	ND (0.57)
Lead	14.7	14.4	11.4	17.6	15.1	8.4	18.8	14.3	12	12.7	24.2	14.3	13.5	24.8	7.9
Manganese	944 J ^[H]	561 J ^[H]	667 J ^[H]	347 J ^[H]	397 J ^[H]	315 J ^[H]	309 J ^[H]	390 J ^[H]	229 J ^[H]	465 J ^[H]	219 J ^[H]	662 J ^[H]	453 J ^[H]	366 J ^[H]	348 J ^[H]
Mercury	0.030 B	0.033 B	0.024 B	0.13	0.020 B	0.018 B	0.057 B	0.029 B	0.039 B	0.040 B	0.087 B	0.034 B	0.034 B	0.047 B	0.027 B
Nickel	19.3	19	18.5	25.6	21	14.6	16.7	17.9	20.6	20.8	22.8	18.3	16.8	20.8	21.4
Selenium	0.65	1	0.45 B	0.6	0.61	ND (0.47)	0.6	0.49 B	0.67	ND (0.52)	ND (0.48)	0.73	0.55	ND (0.51)	ND (0.45)
Silver	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.51)	ND (0.47)	ND (0.48)	ND (0.50)	ND (0.50)	ND (0.52)	ND (0.48)	ND (0.50)	ND (0.49)	ND (0.51)	ND (0.45)
Thallium	ND (0.99)	ND (0.99)	ND (0.97)	ND (0.99)	ND (1.0)	ND (0.94)	ND (0.97)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.96)	ND (1.0)	ND (0.98)	1.7	1.5
Vanadium	25.7	27	21.9	26.7	25	18.1	18.3	20.7	24.7	22.4	14.3	23.2	20.5	22.3	22
Zinc	71.5	72.1	52.7	93	67.7	51.4	79.8	70.9	68.6	62.2	279	59.9	64.6	93.8 J	46.7 J
PCBs (ug/kg)															
Aroclor-1016	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	ND (42)	ND (37)
Aroclor-1221	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	ND (42)	ND (37)
Aroclor-1232	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	ND (42)	ND (37)
Aroclor-1242	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	ND (42)	ND (37)
Aroclor-1248	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	23 J	ND (37)
Aroclor-1254	ND (41)	ND (41)	ND (40)	73	ND (42)	ND (39)	19 J	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	ND (42)	ND (37)
Aroclor-1260	ND (41)	ND (41)	ND (40)	ND (41)	ND (42)	ND (39)	ND (40)	ND (41)	ND (41)	ND (43)	ND (39)	ND (41)	ND (41)	17 J	ND (37)
Semi-Volatile Organic Compounds (ug/kg)															
2,2-oxybis(1-Chloropropane)	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,4,5-Trichlorophenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,4,6-Trichlorophenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,4-Dichlorophenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,4-Dimethylphenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,4-Dinitrophenol	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
2,4-Dinitrotoluene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2,6-Dinitrotoluene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2-Chloronaphthalene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2-Chlorophenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2-Methyl naphthalene	38 J	ND (820)	ND (1300)	14 J	12 J	66 J	190 J	77 J	13 J	18 J	39 J	13 J	ND (810)	ND (330)	160 J
2-Methylphenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
2-Nitroaniline	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
2-Nitrophenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
3,3-Dichlorobenzidine	ND (2000)	ND (4900)	ND (7800)	ND (2000)	ND (2000)	ND (7500)	ND (1900)	ND (5000)	ND (2000)	ND (2100)	ND (3800)	ND (2000)	ND (4900)	ND (2000)	ND (1800)
3-Nitroaniline	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
4,6-Dinitro-2-methylphenol	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
4-Bromophenyl phenyl ether	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
4-Chloro-3-methylphenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

	AOI-01 GP-8002 10/16/2006 4 - 6 ft FD	AOI-01 GP-8002 10/16/2006 4 - 6 ft N	AOI-01 GP-8002 10/16/2006 8 - 9.8 ft N	AOI-02 GP-8003 10/16/2006 0 - 2 ft N	AOI-02 GP-8003 10/16/2006 4 - 6 ft N	AOI-02 GP-8003 10/16/2006 8 - 10 ft N	AOI-02 GP-8004 10/16/2006 0 - 2 ft N	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft FD	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft N	AOI-02 GP-8004 10/16/2006 6 - 8 ft N	AOI-02 GP-8005 10/16/2006 0 - 2 ft N	AOI-02 GP-8005 10/16/2006 4 - 6 ft N	AOI-02 GP-8005 10/16/2006 6 - 8 ft N	AOI-02 GP-8006 10/17/2006 0 - 2 ft N	AOI-02 GP-8006 10/17/2006 12 - 14 ft FD
Semi-Volatile Organic Compounds (ug/kg) (continued)															
4-Chloroaniline	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
4-Chlorophenyl phenyl ether	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
4-Methylphenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
4-Nitroaniline	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
4-Nitrophenol	ND (1700)	ND (4200)	ND (6600)	ND (1700)	ND (1700)	ND (6400)	ND (1600)	ND (4200)	ND (1700)	ND (1800)	ND (3300)	ND (1700)	ND (4200)	ND (1700)	ND (1500)
Acenaphthene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	16 J	ND (820)	ND (330)	ND (340)	75 J	ND (330)	ND (810)	ND (330)	ND (300)
Acenaphthylene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	9.1 J	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Acetophenone	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Anthracene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	36 J	ND (820)	ND (330)	ND (340)	230 J	ND (330)	ND (810)	ND (330)	ND (300)
Atrazine	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Benzaldehyde	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Benzo(a)anthracene	30 J	ND (820)	ND (1300)	18 J	ND (330)	ND (1200)	100 J	ND (820)	8.4 J	8.6 J	930	ND (330)	ND (810)	25 J	ND (300)
Benzo(a)pyrene	ND (330)	ND (820)	ND (1300)	20 J	ND (330)	ND (1200)	99 J	ND (820)	ND (330)	ND (340)	1000	ND (330)	ND (810)	34 J	ND (300)
Benzo(b)fluoranthene	21 J	ND (820)	ND (1300)	26 J	11 J	ND (1200)	160 J	ND (820)	12 J	17 J	1200	ND (330)	43 J	43 J	ND (300)
Benzo(g,h,i)perylene	ND (330)	ND (820)	ND (1300)	19 J	ND (330)	ND (1200)	63 J	ND (820)	ND (330)	ND (340)	660	ND (330)	ND (810)	33 J	ND (300)
Benzo(k)fluoranthene	ND (330)	ND (820)	ND (1300)	14 J	ND (330)	ND (1200)	73 J	ND (820)	ND (330)	ND (340)	500 J	ND (330)	ND (810)	23 J	ND (300)
Biphenyl	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
bis(2-Chloroethoxy)methane	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
bis(2-Chloroethyl)ether	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
bis(2-Ethylhexyl)phthalate	45 J B	370 J B	ND (1300)	150 J B	780 B	100 J B	110 J B	95 J B	170 J B	200 J B	560 J B	110 J B	420 J B	ND (330)	20 J
Butyl benzylphthalate	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Caprolactam	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	61 J	59 J	98 J	73 J	ND (810)	ND (330)	ND (300)
Carbazole	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	26 J	ND (820)	ND (330)	ND (340)	97 J	ND (330)	ND (810)	ND (330)	ND (300)
Chrysene	33 J	ND (820)	ND (1300)	23 J	ND (330)	ND (1200)	190 J	58 J	14 J	16 J	840	ND (330)	ND (810)	28 J	ND (300)
Dibenzo(a,h)anthracene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	13 J	ND (820)	ND (330)	ND (340)	120 J	ND (330)	ND (810)	ND (330)	ND (300)
Dibenzofuran	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	49 J	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Diethyl phthalate	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Dimethyl phthalate	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Di-n-butylphthalate	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	37 J	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Di-n-octyl phthalate	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Fluoranthene	35 J	ND (820)	ND (1300)	35 J	21 J	ND (1200)	190 J	51 J	20 J	16 J	1900	9.2 J	62 J	39 J	ND (300)
Fluorene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	15 J	ND (820)	ND (330)	ND (340)	83 J	ND (330)	ND (810)	ND (330)	ND (300)
Hexachlorobenzene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Hexachlorobutadiene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Hexachlorocyclopentadiene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Hexachloroethane	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Indeno(1,2,3-cd)pyrene	ND (330)	ND (820)	ND (1300)	13 J	ND (330)	ND (1200)	55 J	ND (820)	ND (330)	ND (340)	580 J	ND (330)	ND (810)	27 J	ND (300)
Isophorone	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Naphthalene	25 J B	ND (820)	ND (1300)	9.1 J	ND (330)	ND (1200)	130 J	41 J B	9.1 J	9.8 J	67 J	9.6 J	ND (810)	ND (330)	170 J
Nitrobenzene	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
N-Nitrosodi-n-propylamine	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
N-Nitrosodiphenylamine	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Pentachlorophenol	ND (410)	ND (1000)	ND (1600)	ND (410)	ND (420)	ND (1600)	ND (400)	ND (1000)	ND (410)	ND (430)	ND (790)	ND (410)	ND (1000)	ND (420)	ND (370)
Phenanthrene	23 J	ND (820)	ND (1300)	17 J	18 J	ND (1200)	150 J	56 J	11 J	15 J	860	10 J	69 J	ND (330)	ND (300)
Phenol	ND (330)	ND (820)	ND (1300)	ND (330)	ND (330)	ND (1200)	ND (320)	ND (820)	ND (330)	ND (340)	ND (630)	ND (330)	ND (810)	ND (330)	ND (300)
Pyrene	32 J	ND (820)	ND (1300)	30 J	19 J	ND (1200)	200 J	58 J	16 J	20 J	1500	8.8 J	57 J	34 J	ND (300)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	AOI-01 GP-8002 10/16/2006 4 - 6 ft FD	AOI-01 GP-8002 10/16/2006 4 - 6 ft N	AOI-01 GP-8002 10/16/2006 8 - 9.8 ft N	AOI-02 GP-8003 10/16/2006 0 - 2 ft N	AOI-02 GP-8003 10/16/2006 4 - 6 ft N	AOI-02 GP-8003 10/16/2006 8 - 10 ft N	AOI-02 GP-8004 10/16/2006 0 - 2 ft N	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft FD	AOI-02 GP-8004 10/16/2006 10 - 11.5 ft N	AOI-02 GP-8004 10/16/2006 6 - 8 ft N	AOI-02 GP-8005 10/16/2006 0 - 2 ft N	AOI-02 GP-8005 10/16/2006 4 - 6 ft N	AOI-02 GP-8005 10/16/2006 6 - 8 ft N	AOI-02 GP-8006 10/17/2006 0 - 2 ft N	AOI-02 GP-8006 10/17/2006 12 - 14 ft FD
Total Solids (%)															
Total Solids	80.9	80.9	82.2	80.8	79	85.1	82.6	80	79.8	77.6	83.6	79.8	81.3	79.1	88.5
Volatile Organic Compounds (ug/kg)															
1,1,1-Trichloroethane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
1,1,2,2-Tetrachloroethane	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)
1,1,2-Trichloroethane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
1,1-Dichloroethane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
1,1-Dichloroethene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
1,2,4-Trichlorobenzene	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
1,2-Dibromo-3-chloropropane (DBCP)	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
1,2-Dibromoethane	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
1,2-Dichlorobenzene	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	98
1,2-Dichloroethane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
1,2-Dichloropropane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	9.5 J
1,3-Dichlorobenzene	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)
1,4-Dichlorobenzene	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	12 J
2-Butanone	ND (740)	ND (740)	ND (730)	ND (740)	ND (760)	ND (700)	ND (730)	ND (750)	ND (750)	ND (770)	ND (720)	ND (750)	ND (740)	ND (760)	ND (680)
2-Hexanone	ND (2500)	ND (2500)	ND (2400)	ND (2500)	ND (2500)	ND (2300)	ND (2400)	ND (2500)	ND (2500)	ND (2600)	ND (2400)	ND (2500)	ND (2500)	ND (2500)	ND (2300)
4-Methyl-2-pentanone	ND (2500)	ND (2500)	ND (2400)	ND (2500)	ND (2500)	ND (2300)	ND (2400)	ND (2500)	ND (2500)	ND (2600)	29 J	ND (2500)	ND (2500)	ND (2500)	ND (2300)
Acetone	680 J B	630 J B	680 J B	650 J B	690 J B	570 J B	630 J B	690 J B	710 J B	680 J B	620 J B	710 J B	610 J B	660 J B	560 J B
Benzene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	8.5 J	ND (49)	ND (51)	380 TM
Bromodichloromethane	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)
Bromoform	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)
Bromomethane	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
Carbon disulfide	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
Carbon tetrachloride	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Chlorobenzene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Chloroethane	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
Chloroform	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Chloromethane	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
cis-1,2-Dichloroethene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	21 J	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
cis-1,3-Dichloropropene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Cyclohexane	ND (1200)	ND (1200)	ND (1200)	ND (1200)	ND (1200)	10 J	16 J	ND (1200)	ND (1200)	ND (1200)	ND (1100)	ND (1200)	ND (1200)	ND (1200)	130 J
Dibromochloromethane	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Dichlorodifluoromethane (CFC-12)	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)
Ethylbenzene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	8.7 J	ND (50)	ND (50)	ND (52)	29 J	ND (50)	ND (49)	ND (51)	390
Isopropylbenzene	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	9.4 J	7.2 J	ND (250)	ND (250)	350
Methyl acetate	350 J B	330 J B	360 J B	350 J B	390 J B	310 J B	330 J B	380 J B	370 J B	390 J B	340 J B	370 J B	340 J B	350 J B	290 J B
Methyl cyclohexane	ND (1200)	9.9 J	26 J	ND (1200)	ND (1200)	48 J	52 J	ND (1200)	21 J	ND (1200)	15 J	24 J	16 J	22 J	1100
Methyl tert butyl ether (MTBE)	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
Methylene chloride	ND (120)	ND (120)	ND (120)	ND (120)	ND (130)	ND (120)	ND (120)	ND (120)	ND (130)	ND (130)	ND (120)	ND (130)	ND (120)	ND (130)	ND (110)
Styrene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Tetrachloroethene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Toluene	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	34 J	ND (100)	14 J	ND (100)	15 J	14 J	12 J	18 J	16 J
trans-1,2-Dichloroethene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
trans-1,3-Dichloropropene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Trichloroethene	ND (49)	ND (49)	ND (49)	ND (49)	ND (51)	ND (47)	ND (48)	ND (50)	ND (50)	ND (52)	ND (48)	ND (50)	ND (49)	ND (51)	ND (45)
Trichlorofluoromethane (CFC-11)	ND (99)	ND (99)	ND (97)	ND (99)	ND (100)	ND (94)	ND (97)	ND (100)	ND (100)	ND (100)	ND (96)	ND (100)	ND (98)	ND (100)	ND (90)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

	AOI-01	AOI-01	AOI-01	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02
	GP-8002	GP-8002	GP-8002	GP-8003	GP-8003	GP-8003	GP-8004	GP-8004	GP-8004	GP-8004	GP-8005	GP-8005	GP-8005	GP-8006	GP-8006
	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/17/2006	10/17/2006
	4 - 6 ft	4 - 6 ft	8 - 9.8 ft	0 - 2 ft	4 - 6 ft	8 - 10 ft	0 - 2 ft	10 - 11.5 ft	10 - 11.5 ft	6 - 8 ft	0 - 2 ft	4 - 6 ft	6 - 8 ft	0 - 2 ft	12 - 14 ft
chemical_name	FD	N	N	N	N	N	N	FD	N	N	N	N	N	N	FD
Volatile Organic Compounds (ug/kg) (continued)															
Trifluorotrichloroethane (Freon 113)	ND (250)	ND (250)	ND (240)	ND (250)	ND (250)	ND (230)	ND (240)	ND (250)	ND (250)	ND (260)	ND (240)	ND (250)	ND (250)	ND (250)	ND (230)
Vinyl chloride	ND (62)	ND (62)	ND (61)	ND (62)	ND (63)	ND (59)	ND (61)	ND (62)	ND (63)	ND (64)	ND (60)	ND (63)	ND (61)	ND (63)	ND (57)
Xylenes (total)	ND (150)	ND (150)	ND (150)	ND (150)	ND (150)	ND (140)	56 J	ND (150)	25 J	ND (150)	83 J	23 J	ND (150)	27 J	1800

Notes and Abbreviations:

- Criteria presented are available generic criteria for detected compounds only.
 - A: Indicates result is greater than Residential Direct Contact (Part 201)
 - B: Indicates result is greater than Industrial Direct Contact (Part 201)
 - C: Indicates result is greater than Residential Volatilization to Indoor Air (Part 201)
 - D: Indicates result is greater than Industrial Volatilization to Indoor Air (Part 201)
 - E: Indicates result is greater than Residential Volatilization to Ambient Air (Part 201)
 - F: Indicates result is greater than Saturation Limit (Part 201)
 - G: Indicates result is greater than Residential Particulate Inhalation (Part 201)
 - H: Indicates result is greater than Drinking Water Protection (Part 201)
- ND (#): Compound not detected above the indicated reporting limit.
- Results flagged red exceed criteria.
- Metals below the background criteria are not flagged red.
Background criteria only shown for chemicals with exceedances.

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	AOI-02 GP-8006 10/17/2006 12 - 14 ft N	AOI-02 GP-8006 10/17/2006 8 - 10 ft N	AOI-02 GP-8007 10/17/2006 0 - 2 ft N	AOI-02 GP-8007 10/17/2006 4 - 6 ft N	AOI-02 GP-8007 10/17/2006 8 - 9.8 ft N	AOI-02 GP-8008 10/17/2006 0 - 2 ft N	AOI-02 GP-8008 10/17/2006 8 - 10 ft N	AOI-04 GP-8010 10/16/2006 0 - 2 ft N	AOI-04 GP-8010 10/16/2006 4 - 6 ft N	AOI-04 GP-8010 10/16/2006 8 - 10 ft N	AOI-05 GP-8009 10/16/2006 0 - 2 ft N	AOI-05 GP-8009 10/16/2006 12 - 14 ft N	AOI-05 GP-8009 10/16/2006 8 - 10 ft N	AOI-05 GP-8011 10/16/2006 0 - 2 ft N	AOI-05 GP-8011 10/16/2006 4 - 6 ft N	AOI-05 GP-8011 10/16/2006 8 - 10 ft N
Metals (mg/kg)																
Antimony	1.3	1.6	0.86	0.92	0.76	0.75	0.94	ND (0.55)	ND (0.55)	0.39 B	0.40 B	0.72	0.55	ND (0.53)	0.57 B	0.51 B
Arsenic	4.2	21.5 ^[A]	8.9 ^[A]	7.5	10.4 ^[A]	8.1 ^[A]	8.6 ^[A]	3.4	3.4	3.2	3.2	10.2 ^[A]	3.3	2.7	3.5	3.7
Barium	21	77.6	61.5	77.7	88.5	79.7	75.8	22	14.3	10.5	25	117	9.5	12.3	10.9	9.5
Beryllium	0.22	0.62	0.31	0.34	0.41	0.36	0.33	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.17)	0.49	ND (0.18)	ND (0.17)	ND (0.18)	ND (0.18)
Cadmium	ND (0.091)	ND (0.10)	0.11	0.12	ND (0.10)	0.073 B	ND (0.10)	0.1	0.086 B	0.099	0.097	0.25	0.088	0.072 B	0.085 B	0.087 B
Chromium	9.6	17.5	15.6	12.8	17.1	16.2	17	5.1	5	4.7	4.1	17	3.7	3.5	4.7	4.3
Cobalt	5.2 ^[H]	11.4 ^[H]	6.5 ^[H]	7.7 ^[H]	8.7 ^[H]	7.3 ^[H]	8.5 ^[H]	2.5 ^[H]	2.3 ^[H]	2.3 ^[H]	2.2 ^[H]	17.9 ^[H]	2.1 ^[H]	1.8 ^[H]	2.4 ^[H]	2.4 ^[H]
Copper	8.9	12.2	16.5	12.9	15.1	17.2	14.8	6.1	5.4	5	5.3	17.3	4.7	4.3	5.1	5
Cyanide (total)	ND (0.57)	ND (0.63)	ND (0.61)	ND (0.60)	ND (0.63)	ND (0.60)	ND (0.63)	ND (0.55)	ND (0.55)	ND (0.56)	ND (0.54)	ND (0.62)	ND (0.55)	ND (0.53)	ND (0.58)	ND (0.57)
Lead	9	10.6	26.5	12.8	13.1	26.6	11.6	3.2	3.2	3.2	3	9.7	3.2	2.9	3.5	3.2
Manganese	636 J ^[H]	2450 J ^[H]	315 J ^[H]	592 J ^[H]	396 J ^[H]	339 J ^[H]	976 J ^[H]	142 J ^[H]	135 J ^[H]	128 J ^[H]	131 J ^[H]	1130 J ^[H]	122 J ^[H]	120 J ^[H]	147 J ^[H]	130 J ^[H]
Mercury	0.026 B	0.047 B	0.065 B	0.051 B	0.040 B	0.094 B	0.050 B	ND (0.088)	ND (0.088)	ND (0.089)	ND (0.087)	ND (0.10)	ND (0.088)	ND (0.085)	ND (0.092)	ND (0.091)
Nickel	12.5	24.1	17.4	16.6	20.6	20	20.5	5.8	5.6	5.3	5	33	4.8	4.4	5.5	5.1
Selenium	ND (0.45)	ND (0.50)	ND (0.49)	ND (0.48)	ND (0.51)	ND (0.48)	ND (0.50)	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.43)	0.51	ND (0.44)	ND (0.42)	ND (0.46)	ND (0.46)
Silver	ND (0.45)	ND (0.50)	ND (0.49)	ND (0.48)	ND (0.51)	ND (0.48)	ND (0.50)	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.43)	ND (0.50)	ND (0.44)	ND (0.42)	ND (0.46)	ND (0.46)
Thallium	2.1	5.7 ^[H]	1.6	2.3	1.2	1.4	2.9 ^[H]	ND (0.88)	ND (0.88)	ND (0.89)	0.65 B	ND (1.0)	ND (0.88)	ND (0.85)	ND (0.92)	ND (0.91)
Vanadium	22.8	36	17.3	18.6	22.8	21.8	24.5	8.5	7.6	7.8	7.1	27	6.8	6.5	8.4	7.9
Zinc	30.3 J	71.9 J	74.4 J	77.3 J	60.4 J	76.0 J	55.5 J	20.2	19.8	19.6	18.8 E	47.2	18.7	28.3	20.6	20.2
PCBs (ug/kg)																
Aroclor-1016	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1221	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1232	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1242	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1248	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1254	ND (37)	ND (42)	180	ND (39)	ND (42)	ND (39)	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Aroclor-1260	ND (37)	ND (42)	ND (40)	ND (39)	ND (42)	15 J	ND (42)	ND (36)	ND (36)	ND (37)	ND (36)	ND (41)	ND (36)	ND (35)	ND (38)	ND (38)
Semi-Volatile Organic Compounds (ug/kg)																
2,2-oxybis(1-Chloropropane)	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,4,5-Trichlorophenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,4,6-Trichlorophenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,4-Dichlorophenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,4-Dimethylphenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,4-Dinitrophenol	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
2,4-Dinitrotoluene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2,6-Dinitrotoluene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2-Chloronaphthalene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2-Chlorophenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2-Methyl naphthalene	14 J	ND (330)	23 J	ND (310)	ND (330)	ND (310)	18 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2-Methylphenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
2-Nitroaniline	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
2-Nitrophenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
3,3-Dichlorobenzidine	ND (1800)	ND (2000)	ND (2000)	ND (1900)	ND (2000)	ND (1900)	ND (2000)	ND (1800)	ND (1800)	ND (1800)	ND (1700)	ND (2000)	ND (1800)	ND (1700)	ND (1800)	ND (1800)
3-Nitroaniline	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
4,6-Dinitro-2-methylphenol	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
4-Bromophenyl phenyl ether	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
4-Chloro-3-methylphenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-04	AOI-04	AOI-04	AOI-05	AOI-05	AOI-05	AOI-05	AOI-05	AOI-05
	GP-8006	GP-8006	GP-8007	GP-8007	GP-8007	GP-8008	GP-8008	GP-8010	GP-8010	GP-8010	GP-8009	GP-8009	GP-8009	GP-8011	GP-8011	GP-8011
	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006
	12 - 14 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 9.8 ft	0 - 2 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 10 ft	0 - 2 ft	12 - 14 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 10 ft
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semi-Volatile Organic Compounds (ug/kg) (continued)																
4-Chloroaniline	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
4-Chlorophenyl phenyl ether	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
4-Methylphenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
4-Nitroaniline	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
4-Nitrophenol	ND (1500)	ND (1700)	ND (1700)	ND (1600)	ND (1700)	ND (1600)	ND (1700)	ND (1500)	ND (1500)	ND (1500)	ND (1500)	ND (1700)	ND (1500)	ND (1400)	ND (1600)	ND (1500)
Acenaphthene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Acenaphthylene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	69 J	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Acetophenone	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Anthracene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	100 J	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	9.3 J	ND (300)	ND (300)
Atrazine	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Benzaldehyde	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Benzo(a)anthracene	ND (300)	ND (330)	21 J	ND (310)	ND (330)	290 J	190 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	29 J	ND (300)	ND (300)
Benzo(a)pyrene	ND (300)	ND (330)	24 J	ND (310)	ND (330)	260 J	230 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	37 J	ND (300)	ND (300)
Benzo(b)fluoranthene	ND (300)	ND (330)	34 J	ND (310)	ND (330)	260 J	280 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	47 J	ND (300)	ND (300)
Benzo(g,h,i)perylene	ND (300)	ND (330)	20 J	ND (310)	ND (330)	130 J	180 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	29 J	ND (300)	ND (300)
Benzo(k)fluoranthene	ND (300)	ND (330)	18 J	ND (310)	ND (330)	160 J	130 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	22 J	ND (300)	ND (300)
Biphenyl	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
bis(2-Chloroethoxy)methane	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
bis(2-Chloroethyl)ether	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
bis(2-Ethylhexyl)phthalate	ND (300)	23 J	ND (320)	30 J	ND (330)	ND (310)	70 J	550 B	110 J B	110 J B	21 J	480 B	380 B	350 B	130 J B	160 J B
Butyl benzylphthalate	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Caprolactam	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	61 J B	ND (330)	48 J	ND (290)	ND (290)	ND (290)	46 J	ND (290)	ND (280)	48 J	42 J
Carbazole	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	23 J	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Chrysene	ND (300)	ND (330)	24 J	17 J	ND (330)	250 J	210 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	39 J	ND (300)	ND (300)
Dibenzo(a,h)anthracene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	34 J	44 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Dibenzofuran	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	26 J	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Diethyl phthalate	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Dimethyl phthalate	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Di-n-butylphthalate	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	31 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Di-n-octyl phthalate	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Fluoranthene	ND (300)	ND (330)	42 J	21 J	ND (330)	680	270 J	ND (290)	ND (290)	ND (290)	ND (290)	2.7 J	ND (290)	70 J	ND (300)	ND (300)
Fluorene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	68 J	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Hexachlorobenzene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Hexachlorobutadiene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Hexachlorocyclopentadiene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Hexachloroethane	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Indeno(1,2,3-cd)pyrene	ND (300)	ND (330)	17 J	ND (310)	ND (330)	120 J	140 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	23 J	ND (300)	ND (300)
Isophorone	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Naphthalene	19 J	ND (330)	16 J	ND (310)	ND (330)	ND (310)	17 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Nitrobenzene	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
N-Nitrosodi-n-propylamine	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
N-Nitrosodiphenylamine	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Pentachlorophenol	ND (370)	ND (420)	ND (400)	ND (390)	ND (420)	ND (390)	ND (420)	ND (360)	ND (360)	ND (370)	ND (360)	ND (410)	ND (360)	ND (350)	ND (380)	ND (380)
Phenanthrene	ND (300)	ND (330)	22 J	ND (310)	ND (330)	440	72 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	36 J	ND (300)	ND (300)
Phenol	ND (300)	ND (330)	ND (320)	ND (310)	ND (330)	ND (310)	ND (330)	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	ND (280)	ND (300)	ND (300)
Pyrene	ND (300)	ND (330)	33 J	19 J	ND (330)	500	220 J	ND (290)	ND (290)	ND (290)	ND (290)	ND (330)	ND (290)	60 J	ND (300)	ND (300)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

	AOI-02 GP-8006 10/17/2006 12 - 14 ft	AOI-02 GP-8006 10/17/2006 8 - 10 ft	AOI-02 GP-8007 10/17/2006 0 - 2 ft	AOI-02 GP-8007 10/17/2006 4 - 6 ft	AOI-02 GP-8007 10/17/2006 8 - 9.8 ft	AOI-02 GP-8008 10/17/2006 0 - 2 ft	AOI-02 GP-8008 10/17/2006 8 - 10 ft	AOI-04 GP-8010 10/16/2006 0 - 2 ft	AOI-04 GP-8010 10/16/2006 4 - 6 ft	AOI-04 GP-8010 10/16/2006 8 - 10 ft	AOI-05 GP-8009 10/16/2006 0 - 2 ft	AOI-05 GP-8009 10/16/2006 12 - 14 ft	AOI-05 GP-8009 10/16/2006 8 - 10 ft	AOI-05 GP-8011 10/16/2006 0 - 2 ft	AOI-05 GP-8011 10/16/2006 4 - 6 ft	AOI-05 GP-8011 10/16/2006 8 - 10 ft
chemical_name	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total Solids (%)																
Total Solids	88.3	79.4	82	83.9	79.1	84	79.4	90.8	90.7	89.9	92.4	80.2	91.4	94.1	86.7	87.8
Volatile Organic Compounds (ug/kg)																
1,1,1-Trichloroethane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,1,2,2-Tetrachloroethane	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
1,1,2-Trichloroethane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,1-Dichloroethane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,1-Dichloroethene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,2,4-Trichlorobenzene	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
1,2-Dibromo-3-chloropropane (DBCP)	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
1,2-Dibromoethane	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
1,2-Dichlorobenzene	70 J	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
1,2-Dichloroethane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,2-Dichloropropane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
1,3-Dichlorobenzene	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
1,4-Dichlorobenzene	9.7 J	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
2-Butanone	ND (680)	ND (760)	ND (730)	ND (720)	ND (760)	ND (710)	ND (760)	ND (730)	ND (730)	ND (700)	ND (700)	ND (750)	ND (620)	ND (710)	ND (730)	ND (710)
2-Hexanone	ND (2300)	ND (2500)	ND (2400)	ND (2400)	ND (2500)	ND (2400)	ND (2500)	ND (2400)	ND (2400)	ND (2300)	ND (2300)	ND (2500)	ND (2100)	ND (2400)	ND (2400)	ND (2400)
4-Methyl-2-pentanone	ND (2300)	ND (2500)	ND (2400)	ND (2400)	ND (2500)	ND (2400)	ND (2500)	ND (2400)	ND (2400)	ND (2300)	ND (2300)	ND (2500)	ND (2100)	ND (2400)	ND (2400)	ND (2400)
Acetone	630 J B	680 J B	670 J B	520 J B	620 J B	620 J B	610 J B	910 B	790 B	790 B	610 J	720 J B	740 B	630 J	750	650 J
Benzene	280 ^{PH}	9.3 J	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Bromodichloromethane	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
Bromoform	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
Bromomethane	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Carbon disulfide	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Carbon tetrachloride	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Chlorobenzene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Chloroethane	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Chloroform	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Chloromethane	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
cis-1,2-Dichloroethene	ND (45)	ND (50)	ND (49)	ND (48)	19 J	ND (48)	20 J	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
cis-1,3-Dichloropropene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Cyclohexane	82 J	ND (1200)	ND (1200)	ND (1100)	ND (1200)	ND (1100)	ND (1200)	ND (1200)	ND (1200)	ND (1100)	ND (1100)	ND (1200)	ND (1000)	ND (1100)	ND (1200)	ND (1100)
Dibromochloromethane	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Dichlorodifluoromethane (CFC-12)	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)
Ethylbenzene	210	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Isopropylbenzene	200 J	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Methyl acetate	300 J B	360 J B	380 J B	310 J B	400 J B	350 J B	340 J B	520 J B	430 J B	400 J B	870 J B	370 J B	360 J B	470 J B	450 J B	430 J B
Methyl cyclohexane	790 J	27 J	8.7 J	10 J	47 J	18 J	33 J	ND (1200)	ND (1200)	ND (1100)	ND (1100)	11 J	ND (1000)	ND (1100)	ND (1200)	ND (1100)
Methyl tert butyl ether (MTBE)	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Methylene chloride	ND (110)	ND (130)	ND (120)	ND (120)	ND (130)	ND (120)	ND (130)	ND (120)	ND (120)	ND (120)	ND (120)	ND (120)	ND (100)	ND (120)	ND (120)	ND (120)
Styrene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Tetrachloroethene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Toluene	10 J	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	13 J	ND (98)	ND (95)
trans-1,2-Dichloroethene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
trans-1,3-Dichloropropene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Trichloroethene	ND (45)	ND (50)	ND (49)	ND (48)	ND (51)	ND (48)	ND (50)	ND (49)	ND (49)	ND (47)	ND (47)	ND (50)	ND (42)	ND (48)	ND (49)	ND (47)
Trichlorofluoromethane (CFC-11)	ND (91)	ND (100)	ND (98)	ND (95)	ND (100)	ND (95)	ND (100)	ND (98)	ND (98)	ND (93)	ND (94)	ND (100)	ND (83)	ND (95)	ND (98)	ND (95)

TABLE 4-1
SUMMARY OF SOIL ANALYTICAL RESULTS
DELPHI CORPORATION
WASTE WATER TREATMENT PLANT, FLINT-EAST COMPLEX
FLINT, MICHIGAN

chemical_name	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-02	AOI-04	AOI-04	AOI-04	AOI-05	AOI-05	AOI-05	AOI-05	AOI-05	AOI-05
	GP-8006	GP-8006	GP-8007	GP-8007	GP-8007	GP-8008	GP-8008	GP-8010	GP-8010	GP-8010	GP-8009	GP-8009	GP-8009	GP-8011	GP-8011	GP-8011
	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/17/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006	10/16/2006
	12 - 14 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 9.8 ft	0 - 2 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 10 ft	0 - 2 ft	12 - 14 ft	8 - 10 ft	0 - 2 ft	4 - 6 ft	8 - 10 ft
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds (ug/kg) (continued)																
Trifluorotrichloroethane (Freon 113)	ND (230)	ND (250)	ND (240)	ND (240)	ND (250)	ND (240)	ND (250)	ND (240)	ND (240)	ND (230)	ND (230)	ND (250)	ND (210)	ND (240)	ND (240)	ND (240)
Vinyl chloride	ND (57)	ND (63)	ND (61)	ND (60)	ND (63)	ND (60)	ND (63)	ND (61)	ND (61)	ND (58)	ND (58)	ND (62)	ND (52)	ND (59)	ND (61)	ND (59)
Xylenes (total)	920	23 J	ND (150)	ND (140)	ND (150)	ND (140)	ND (150)	ND (150)	ND (150)	ND (140)	ND (140)	ND (150)	ND (120)	ND (140)	ND (150)	ND (140)

Notes and Abbreviations:

1. Criteria presented are available generic criteria for detected compounds only.
- A: Indicates result is greater than Residential Direct Contact (Part 201)
- B: Indicates result is greater than Industrial Direct Contact (Part 201)
- C: Indicates result is greater than Residential Volatilization to Indoor Air (Part 201)
- D: Indicates result is greater than Industrial Volatilization to Indoor Air (Part 201)
- E: Indicates result is greater than Residential Volatilization to Ambient Air (Part 201)
- F: Indicates result is greater than Saturation Limit (Part 201)
- G: Indicates result is greater than Residential Particulate Inhalation (Part 201)
- H: Indicates result is greater than Drinking Water Protection (Part 201)
2. ND (#): Compound not detected above the indicated reporting limit.
3. Results flagged red exceed criteria.
4. Metals below the background criteria are not flagged red.
- Background criteria only shown for chemicals with exceedances.

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Chemical Name	Residential Drinking Water Criteria (Part 201)	Direct Contact Groundwater (Part 201)	Volatilization to Residential Indoor Air (Part 201)	Volatilization to Industrial Indoor Air (Part 201)	Groundwater to Surface Water Interface (Part 201)	Solubility	MW-8001 10/11/2006 ft N	MW-8002 10/11/2006 ft N	MW-8003 10/11/2006 ft FD	MW-8003 10/11/2006 ft N	MW-8004 10/11/2006 ft N
Metals (ug/l)											
Antimony	-	-	-	-	-	-	ND (10.0)	ND (10.0)	ND (10.0)	ND (10.0)	ND (10.0)
Arsenic	50	4300	-	-	150	-	101 ^[A]	14.7	6.0 B	12.9	6.6 B
Barium	2000	14000000	-	-	-	-	136	129	117	149	240
Beryllium	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Cadmium	-	-	-	-	-	-	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
Chromium	-	-	-	-	-	-	5	ND (5.0)	ND (5.0)	10.1	5.5
Cobalt	40	2400000	-	-	100	-	2.1 B	ND (7.0)	ND (7.0)	4.3 B	ND (7.0)
Copper	1000	7400000	-	-	-	-	11.1 B J	2.8 B J	3.2 B J	12.2 B J	8.3 B J
Lead	4	-	-	-	-	-	3.0 J	ND (3.0)	ND (3.0)	5.3 J ^[A]	5.5 J ^[A]
Manganese	50	9100000	-	-	-	-	2030 J ^[A]	706 J ^[A]	672 J ^[A]	881 J ^[A]	191 J ^[A]
Mercury	-	-	-	-	-	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Nickel	100	74000000	-	-	-	-	5.2 B	ND (25.0)	2.6 B	11.4 B	8.7 B
Selenium	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Silver	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Thallium	2	13000	-	-	3.7	-	5.2 B ^[AE]	5.2 B ^[AE]	5.5 B ^[AE]	ND (10.0)	ND (10.0)
Vanadium	4.5	970000	-	-	12	-	8 ^[A]	ND (7.0)	ND (7.0)	14.5 ^[AE]	3.2 B
Zinc	2400	110000000	-	-	-	-	9.8 B	ND (20.0)	ND (20.0)	24.5	17.6 B
Cyanide	200	57000	-	-	5.2	-	3.9 B [†]	11 ^{†[E]}	ND (10) [†]	ND (10) [†]	ND (10) [†]
Volatile Organic Compounds (ug/l)											
1,1,1-Trichloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1,2,2-Tetrachloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1,2-Trichloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2,4-Trichlorobenzene	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,2-Dibromo-3-chloropropane (DBCP)	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dibromoethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichlorobenzene	600	160000	160000	160000	16	160000	ND (1.0)	0.42 J	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloropropane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,3-Dichlorobenzene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,4-Dichlorobenzene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
2-Butanone	-	-	-	-	-	-	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)
2-Hexanone	-	-	-	-	-	-	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)
4-Methyl-2-pentanone	-	-	-	-	-	-	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)
Acetone	730	31000000	1000000000	1000000000	1700	1000000000	ND (25)	ND (25)	ND (25)	0.83 J	2.5 J
Benzene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromodichloromethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromoform	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromomethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Carbon disulfide	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

TABLE 4-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Chemical Name	Residential Drinking Water Criteria (Part 201)	Direct Contact Groundwater (Part 201)	Volatilization to Residential Indoor Air (Part 201)	Volatilization to Industrial Indoor Air (Part 201)	Groundwater to Surface Water Interface (Part 201)	Solubility	MW-8001 10/11/2006 ft N	MW-8002 10/11/2006 ft N	MW-8003 10/11/2006 ft FD	MW-8003 10/11/2006 ft N	MW-8004 10/11/2006 ft N
Volatile Organic Compounds (ug/l) (continued)											
Carbon tetrachloride	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroform	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloromethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	70	200000	93000	210000	620	3500000	0.39 J	2.3	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,3-Dichloropropene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Cyclohexane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Dibromochloromethane	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Dichlorodifluoromethane (CFC-12)	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Isopropylbenzene	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Methyl acetate	-	-	-	-	-	-	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Methyl cyclohexane	-	-	-	-	-	-	0.61 J B	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methyl tert butyl ether (MTBE)	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Methylene chloride	-	-	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Styrene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Tetrachloroethene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,3-Dichloropropene	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	5	22000	15000	97000	200	1100000	0.49 J B	0.44 J B	0.34 J B	0.40 J B	0.38 J B
Trichlorofluoromethane (CFC-11)	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trifluorotrichloroethane (Freon 113)	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	-	-	-	-	-	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	-	-	-	-	-	-	ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)	ND (3.0)

Notes and Abbreviations:

- Criteria presented are available generic criteria for detected compounds only.
 - Indicates result is greater than Residential Drinking Water Criteria (Part 201)
 - Indicates result is greater than Direct Contact Groundwater (Part 201)
 - Indicates result is greater than Volatilization to Residential Indoor Air (Part 201)
 - Indicates result is greater than Volatilization to Industrial Indoor Air (Part 201)
 - Indicates result is greater than Groundwater to Surface Water Interface (Part 201)
 - Indicates result is greater than Solubility
- ND (#): Compound not detected above the indicated reporting limit.
- [†]Cyanide results are from samples collected on 24 October 2006.

TABLE 4-3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Analyte	Ecological Sediment Criteria	SE-8001 10/3/2006 0 - 0.25 ft N	SE-8001 10/3/2006 0 - 0.25 ft FD	SE-8002 10/3/2006 0 - 0.25 ft N	SE-8003 10/3/2006 0 - 0.25 ft N	SE-8004 10/3/2006 0 - 0.25 ft N	SE-8005 10/3/2006 0 - 0.25 ft N	SE-8006 10/3/2006 0 - 0.25 ft N
Metals (mg/kg)								
Antimony	-	ND (0.65)	ND (0.62)	ND (0.64)	0.50 B	0.43 B	ND (0.67)	0.68
Arsenic	33 ⁽¹⁾	3.1	2.4	4.8	3	2.9	4.6	4
Barium	-	17.1	24.9	18.2	18.1	19.8	20.4	21.1
Beryllium	-	ND (0.21)	ND (0.20)	ND (0.20)	ND (0.21)	ND (0.20)	0.057 B	ND (0.21)
Cadmium	4.98 ⁽¹⁾	0.23	0.21	0.23	0.17	0.18	0.25	0.2
Chromium	111 ⁽¹⁾	9.6	10.4	33.7	49.1	9.3	11.1	7
Cobalt	-	2.8	2.1	2.8	2.7	1.9	2.8	2.8
Copper	149 ⁽¹⁾	25.8	22.4	20	24	11.7	39.4	11.2
Cyanide (total)	-	0.29 B	ND (0.62)	0.16 B	ND (0.65)	ND (0.63)	ND (0.67)	ND (0.67)
Lead	128 ⁽¹⁾	31.8	35.8	106	26.8	20.9	13.9	11.4
Manganese	-	175 J	172 J	178 J	201 J	138 J	297 J	205 J
Mercury	1.06 ⁽¹⁾	0.020 B	0.025 B	0.033 B	0.018 B	0.030 B	0.030 B	0.025 B
Nickel	48.6 ⁽¹⁾	9	9.5	18.9	7.7	6	12.1	6.7
Selenium	-	ND (0.52)	ND (0.50)	ND (0.51)	ND (0.52)	ND (0.51)	ND (0.53)	ND (0.54)
Silver	1 ⁽³⁾	ND (0.52)	ND (0.50)	0.40 B	ND (0.52)	ND (0.51)	ND (0.53)	ND (0.54)
Thallium	-	ND (1.0)	0.87 B	0.73 B	1.1	0.78 B	1.0 B	ND (1.1)
Vanadium	-	5.9	5.1	9.4	5.9	5.7	7.8	7.9
Zinc	459 ⁽¹⁾	83.9	96.4	134	453	88	163	155
PCBs (ug/kg)								
Aroclor-1016	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Aroclor-1221	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Aroclor-1232	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Aroclor-1242	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Aroclor-1248	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Aroclor-1254	676 ⁽¹⁾	160	85	130	38 J	39 J	30 J	27 J
Aroclor-1260	-	ND (43)	ND (41)	ND (42)	ND (43)	ND (42)	ND (44)	ND (44)
Semi-Volatile Organic Compounds (ug/kg)								
2,2-oxybis(1-Chloropropane)	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,4,5-Trichlorophenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,4,6-Trichlorophenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,4-Dichlorophenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,4-Dimethylphenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,4-Dinitrophenol	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
2,4-Dinitrotoluene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2,6-Dinitrotoluene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2-Chloronaphthalene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2-Chlorophenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2-Methyl naphthalene	561 ⁽¹⁾	22 J	ND (820)	39 J	480 J	22 J	19 J	83 J
2-Methylphenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
2-Nitroaniline	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
2-Nitrophenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)

TABLE 4-3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

		SE-8001	SE-8001	SE-8002	SE-8003	SE-8004	SE-8005	SE-8006
		10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006
	Ecological	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft
Analyte	Sediment Criteria	N	FD	N	N	N	N	N
Semi-Volatile Organic Compounds (ug/kg) (continued)								
3,3-Dichlorobenzidine	-	ND (5200)	ND (5000)	ND (4100)	ND (41000)	ND (2000)	ND (4300)	ND (4300)
3-Nitroaniline	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
4,6-Dinitro-2-methylphenol	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
4-Bromophenyl phenyl ether	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
4-Chloro-3-methylphenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
4-Chloroaniline	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
4-Chlorophenyl phenyl ether	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
4-Methylphenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
4-Nitroaniline	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
4-Nitrophenol	-	ND (4400)	ND (4200)	ND (3500)	ND (35000)	ND (1700)	ND (3600)	ND (3600)
Acenaphthene	16 ⁽²⁾	ND (850)	ND (820)	130 J ^[A]	3000 J ^[A]	160 J ^[A]	49 J ^[A]	57 J ^[A]
Acenaphthylene	44 ⁽³⁾	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	24 J
Acetophenone	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Anthracene	845 ⁽¹⁾	37 J	34 J	260 J	4200 J ^[A]	400	110 J	170 J
Atrazine	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Benzaldehyde	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Benzo(a)anthracene	1050 ⁽¹⁾	140 J	120 J	860	12000 ^[A]	1300 ^[A]	440 J	700 J
Benzo(a)pyrene	1450 ⁽¹⁾	150 J	120 J	830	9900 ^[A]	1100	470 J	790
Benzo(b)fluoranthene	-	220 J	190 J	1200	13000	1200	700	1200
Benzo(g,h,i)perylene	-	110 J	100 J	600 J	5300 J	750	330 J	560 J
Benzo(k)fluoranthene	-	95 J	98 J	450 J	6000 J	700	250 J	380 J
Biphenyl	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
bis(2-Chloroethoxy)methane	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
bis(2-Chloroethyl)ether	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
bis(2-Ethylhexyl)phthalate	182 ⁽⁴⁾	450 J B ^[A]	300 J B ^[A]	720 B ^[A]	680 J B ^[A]	290 J ^[A]	430 J B ^[A]	330 J B ^[A]
Butyl benzylphthalate	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Caprolactam	-	ND (850)	ND (820)	120 J B	1300 J B	ND (330)	ND (700)	120 J B
Carbazole	-	ND (850)	ND (820)	190 J	4400 J	350	120 J	180 J
Chrysene	1290 ⁽¹⁾	180 J	180 J	1000	14000 ^[A]	1500 ^[A]	590 J	940
Dibenzo(a,h)anthracene	63.4 ⁽³⁾	23 J	ND (820)	140 J ^[A]	1600 J ^[A]	ND (330)	78 J ^[A]	130 J ^[A]
Dibenzofuran	2000 ⁽²⁾	ND (850)	ND (820)	69 J	2200 J ^[A]	96 J	ND (700)	60 J
Diethyl phthalate	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Dimethyl phthalate	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	97 J
Di-n-butylphthalate	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Di-n-octyl phthalate	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Fluoranthene	2230 ⁽¹⁾	380 J	400 J	2100	32000 ^[A]	3500 ^[A]	1400	2100
Fluorene	536 ⁽¹⁾	29 J	ND (820)	130 J	3500 J ^[A]	220 J	59 J	73 J
Hexachlorobenzene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Hexachlorobutadiene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Hexachlorocyclopentadiene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Hexachloroethane	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Indeno(1,2,3-cd)pyrene	-	92 J	79 J	510 J	5000 J	650	300 J	510 J
Isophorone	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)

TABLE 4-3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Analyte	Ecological Sediment Criteria	SE-8001	SE-8001	SE-8002	SE-8003	SE-8004	SE-8005	SE-8006
		10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006
		0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft
		N	FD	N	N	N	N	N
Semi-Volatile Organic Compounds (ug/kg) (continued)								
Naphthalene	561 ⁽¹⁾	25 J	ND (820)	46 J	230 J	68 J	24 J	76 J
Nitrobenzene	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
N-Nitrosodi-n-propylamine	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
N-Nitrosodiphenylamine	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Pentachlorophenol	-	ND (1100)	ND (1000)	ND (840)	ND (8500)	ND (420)	ND (880)	ND (880)
Phenanthrene	1170 ⁽¹⁾	200 J	160 J	1400 ^[A]	31000 ^[A]	3100 ^[A]	780	1200 ^[A]
Phenol	-	ND (850)	ND (820)	ND (670)	ND (6800)	ND (330)	ND (700)	ND (710)
Pyrene	1520 ⁽¹⁾	310 J	310 J	1800 ^[A]	27000 ^[A]	3300 ^[A]	1200	1800 ^[A]
Volatile Organic Compounds (ug/kg)								
1,1,1-Trichloroethane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,1,2,2-Tetrachloroethane	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
1,1,2-Trichloroethane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,1-Dichloroethane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,1-Dichloroethene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,2,4-Trichlorobenzene	9200 ⁽²⁾	ND (260)	ND (250)	ND (260)	ND (260)	53 J	ND (270)	ND (270)
1,2-Dibromo-3-chloropropane (DBCP)	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
1,2-Dibromoethane	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
1,2-Dichlorobenzene	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
1,2-Dichloroethane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,2-Dichloropropane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
1,3-Dichlorobenzene	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
1,4-Dichlorobenzene	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
2-Butanone	-	ND (780)	ND (750)	ND (770)	ND (780)	ND (760)	ND (800)	ND (800)
2-Hexanone	-	ND (2600)	ND (2500)	ND (2600)	ND (2600)	ND (2500)	ND (2700)	ND (2700)
4-Methyl-2-pentanone	-	ND (2600)	ND (2500)	ND (2600)	ND (2600)	ND (2500)	ND (2700)	ND (2700)
Acetone	-	ND (780)	ND (750)	ND (770)	ND (780)	ND (760)	ND (800)	ND (800)
Benzene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Bromodichloromethane	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
Bromoform	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
Bromomethane	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Carbon disulfide	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Carbon tetrachloride	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Chlorobenzene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Chloroethane	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Chloroform	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Chloromethane	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
cis-1,2-Dichloroethene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
cis-1,3-Dichloropropene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Cyclohexane	-	ND (1200)	ND (1200)	ND (1200)	ND (1200)	ND (1200)	ND (1300)	ND (1300)
Dibromochloromethane	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Dichlorodifluoromethane (CFC-12)	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
Ethylbenzene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)

TABLE 4-3
SUMMARY OF SEDIMENT ANALYTICAL RESULTS
DELPHI FLINT-EAST
WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Analyte	Ecological Sediment Criteria	SE-8001	SE-8001	SE-8002	SE-8003	SE-8004	SE-8005	SE-8006
		10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006	10/3/2006
		0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft	0 - 0.25 ft
		N	FD	N	N	N	N	N
Volatile Organic Compounds (ug/kg) (continued)								
Isopropylbenzene	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Methyl acetate	-	140 J B	120 J B	120 J B	95 J B	110 J B	140 J B	170 J B
Methyl cyclohexane	-	ND (1200)	ND (1200)	ND (1200)	ND (1200)	85 J	ND (1300)	ND (1300)
Methyl tert butyl ether (MTBE)	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Methylene chloride	-	ND (130)	ND (120)	ND (130)	ND (130)	ND (130)	ND (130)	ND (130)
Styrene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Tetrachloroethene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Toluene	670 ⁽²⁾	ND (100)	ND (100)	ND (100)	ND (100)	29 J	ND (110)	ND (110)
trans-1,2-Dichloroethene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
trans-1,3-Dichloropropene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Trichloroethene	-	ND (52)	ND (50)	ND (51)	ND (52)	ND (51)	ND (53)	ND (54)
Trichlorofluoromethane (CFC-11)	-	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	ND (110)	ND (110)
Trifluorotrichloroethane (Freon 113)	-	ND (260)	ND (250)	ND (260)	ND (260)	ND (250)	ND (270)	ND (270)
Vinyl chloride	-	ND (65)	ND (62)	ND (64)	ND (65)	ND (63)	ND (67)	ND (67)
Xylenes (total)	25 ⁽²⁾	ND (160)	ND (150)	ND (150)	ND (160)	70 J ^(A)	ND (160)	35 J ^(A)

Notes and Abbreviations:

- A: Indicates result is greater than Sediment Criteria.
- (1): Consensus-based Freshwater Sediment Quality Guidelines, EPA, 2000 (EPA 905/R-00/007).
- (2): EcoTox Thresholds, Sediment Quality Criteria or Benchmarks, EPA, 1996 (EPA 540/F-95/038).
- (3): Effects-Range Low, Long et al., 1995.
- (4): Threshold effects Level, Canadian Council of Ministers of the Environment, 1998.

TABLE 5
SUMMARY OF QA/QC ANALYTICAL RESULTS
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

	SE0002-100306-0002TB	0394-101106-0001EB	0394-101106-0002TB	2406-101606-0003TB	2406-101706-0001EB	2406-101706-0004TB	0394-102406-0002EB
Compound	TB 10/3/2006	EB 10/11/2006	TB 10/11/2006	TB 10/16/2006	EB 10/17/2006	TB 10/17/2006	EB 10/24/2006
Metals (mg/l)							
Cyanide (total)	-	-	-	-	-	-	ND (0.010)
Volatile Organic Compounds (ug/l)							
1,1,1-Trichloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,1,2,2-Tetrachloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,1,2-Trichloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,1-Dichloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,1-Dichloroethene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,2,4-Trichlorobenzene	-	ND (5.0)	ND (5.0)	-	ND (5.0)	-	-
1,2-Dibromo-3-chloropropane (DBCP)	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,2-Dibromoethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,2-Dichlorobenzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,2-Dichloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,2-Dichloropropane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,3-Dichlorobenzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
1,4-Dichlorobenzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
2-Butanone	-	1.0 J	ND (25)	-	0.62 J	-	-
2-Hexanone	-	ND (50)	ND (50)	-	ND (50)	-	-
4-Methyl-2-pentanone	-	ND (50)	ND (50)	-	ND (50)	-	-
Acetone	-	2.3 J	ND (25)	-	2.9 J	-	-
Benzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Bromodichloromethane	-	0.23 J	ND (1.0)	-	ND (1.0)	-	-
Bromoform	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Bromomethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Carbon disulfide	-	ND (5.0)	ND (5.0)	-	ND (5.0)	-	-
Carbon tetrachloride	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Chlorobenzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Chloroethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Chloroform	-	0.52 J	ND (1.0)	-	0.27 J	-	-
Chloromethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
cis-1,2-Dichloroethene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
cis-1,3-Dichloropropene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Cyclohexane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Dibromochloromethane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Dichlorodifluoromethane (CFC-12)	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Ethylbenzene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Isopropylbenzene	-	ND (5.0)	ND (5.0)	-	ND (5.0)	-	-
Methyl acetate	-	ND (10)	ND (10)	-	ND (10)	-	-
Methyl cyclohexane	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Methyl tert butyl ether (MTBE)	-	ND (5.0)	ND (5.0)	-	ND (5.0)	-	-
Methylene chloride	-	ND (5.0)	ND (5.0)	-	ND (5.0)	-	-
Styrene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Tetrachloroethene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-

TABLE 5
SUMMARY OF QA/QC ANALYTICAL RESULTS
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

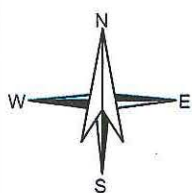
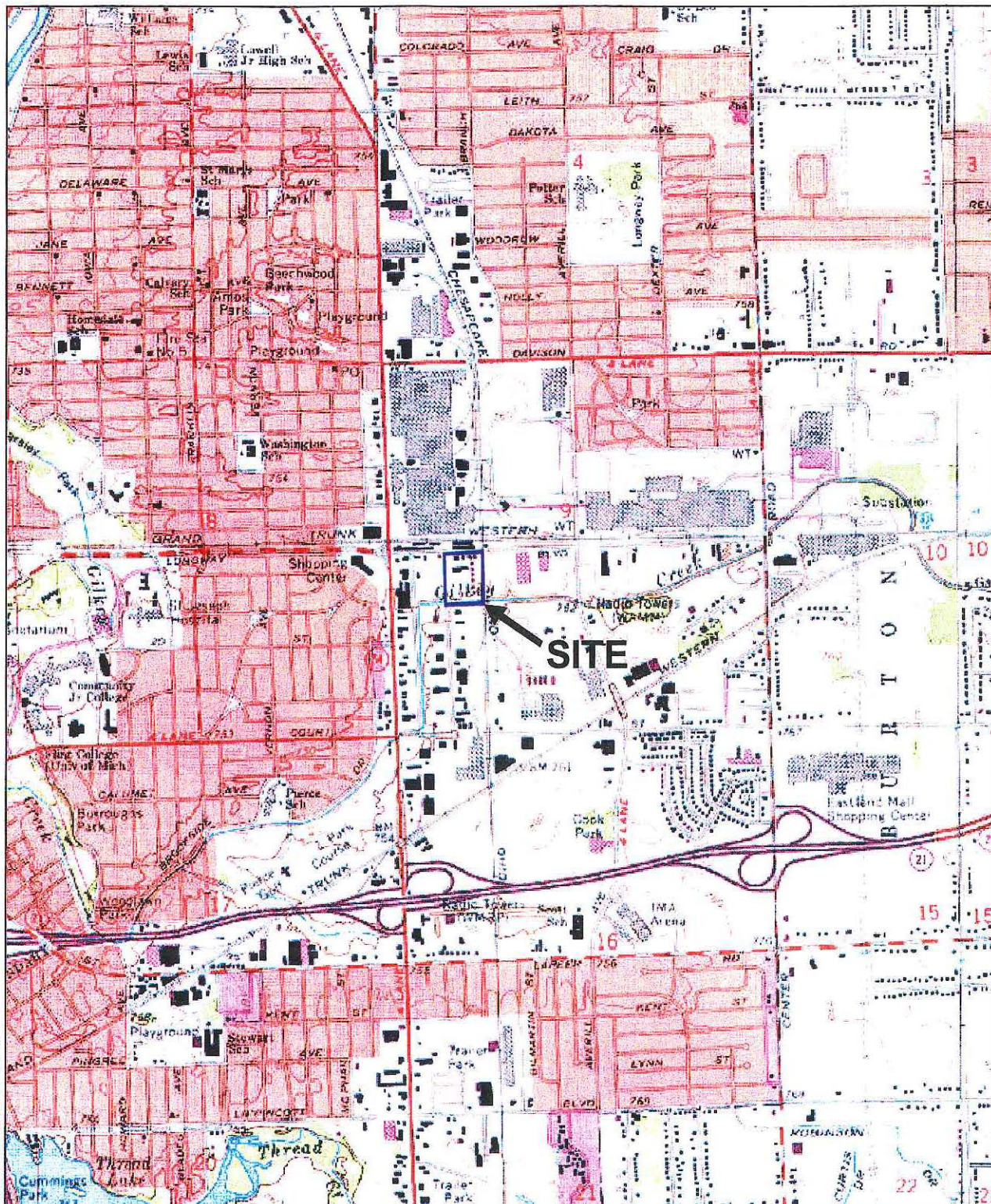
Compound	SE0002-100306-0002TB TB 10/3/2006	0394-101106-0001EB EB 10/11/2006	0394-101106-0002TB TB 10/11/2006	2406-101606-0003TB TB 10/16/2006	2406-101706-0001EB EB 10/17/2006	2406-101706-0004TB TB 10/17/2006	0394-102406-0002EB EB 10/24/2006
Volatile Organic Compounds (ug/l)							
Toluene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
trans-1,2-Dichloroethene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
trans-1,3-Dichloropropene	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Trichloroethene	-	0.39 J B	0.36 J B	-	ND (1.0)	-	-
Trichlorofluoromethane (CFC-11)	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Trifluorotrichloroethane (Freon 113)	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Vinyl chloride	-	ND (1.0)	ND (1.0)	-	ND (1.0)	-	-
Xylenes (total)	-	ND (3.0)	ND (3.0)	-	ND (3.0)	-	-
Volatile Organic Compounds (ug/kg)							
1,1,1-Trichloroethane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,1,2,2-Tetrachloroethane	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
1,1,2-Trichloroethane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,1-Dichloroethane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,1-Dichloroethene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,2,4-Trichlorobenzene	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
1,2-Dibromo-3-chloropropane (DBCP)	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
1,2-Dibromoethane	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
1,2-Dichlorobenzene	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
1,2-Dichloroethane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,2-Dichloropropane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
1,3-Dichlorobenzene	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
1,4-Dichlorobenzene	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
2-Butanone	ND (** 600)	-	-	ND (** 600)	-	ND (** 600)	-
2-Hexanone	ND (** 2000)	-	-	ND (** 2000)	-	ND (** 2000)	-
4-Methyl-2-pentanone	ND (** 2000)	-	-	ND (** 2000)	-	ND (** 2000)	-
Acetone	ND (** 600)	-	-	700 B	-	690 B	-
Benzene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Bromodichloromethane	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
Bromoform	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
Bromomethane	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Carbon disulfide	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Carbon tetrachloride	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Chlorobenzene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Chloroethane	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Chloroform	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Chloromethane	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
cis-1,2-Dichloroethene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
cis-1,3-Dichloropropene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Cyclohexane	ND (** 960)	-	-	ND (** 960)	-	ND (** 960)	-
Dibromochloromethane	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Dichlorodifluoromethane (CFC-12)	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
Ethylbenzene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-

TABLE 5
SUMMARY OF QA/QC ANALYTICAL RESULTS
DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
FLINT, MICHIGAN

Compound	SE0002-100306-0002TB TB 10/3/2006	0394-101106-0001EB EB 10/11/2006	0394-101106-0002TB TB 10/11/2006	2406-101606-0003TB TB 10/16/2006	2406-101706-0001EB EB 10/17/2006	2406-101706-0004TB TB 10/17/2006	0394-102406-0002EB EB 10/24/2006
Volatile Organic Compounds (ug/kg)							
Isopropylbenzene	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Methyl acetate	61 J B	-	-	370 J B	-	350 J B	-
Methyl cyclohexane	ND (** 960)	-	-	ND (** 960)	-	ND (** 960)	-
Methyl tert butyl ether (MTBE)	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Methylene chloride	ND (** 100)	-	-	ND (** 100)	-	ND (** 100)	-
Styrene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Tetrachloroethene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Toluene	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
trans-1,2-Dichloroethene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
trans-1,3-Dichloropropene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Trichloroethene	ND (** 40)	-	-	ND (** 40)	-	ND (** 40)	-
Trichlorofluoromethane (CFC-11)	ND (** 80)	-	-	ND (** 80)	-	ND (** 80)	-
Trifluorotrichloroethane (Freon 113)	ND (** 200)	-	-	ND (** 200)	-	ND (** 200)	-
Vinyl chloride	ND (** 50)	-	-	ND (** 50)	-	ND (** 50)	-
Xylenes (total)	ND (** 120)	-	-	ND (** 120)	-	ND (** 120)	-

Notes and Abbreviations:

- 1. ND (#): Compound not detected above the indicated reporting limit.
- 2. "-": Compound not analyzed.
- 3. TB - Trip Blank; EB - Equipment Blank
- 4. Lab qualifiers defined as follows:
 - B - Method blank contamination. The associated method blank contains the target analyte at a reportable level.
 - J - Estimated result. Result is less than the reporting limit.
 - ** - Indicates Methanol preservation for SW5035. Results not expressed in dry weight.
- 5. Data has not been validated as defined in the project QAPP.



SITE COORDINATES: 43°01'29"N 83°39'03"W



U.S.G.S. QUADRANGLE: FLINT, MICHIGAN

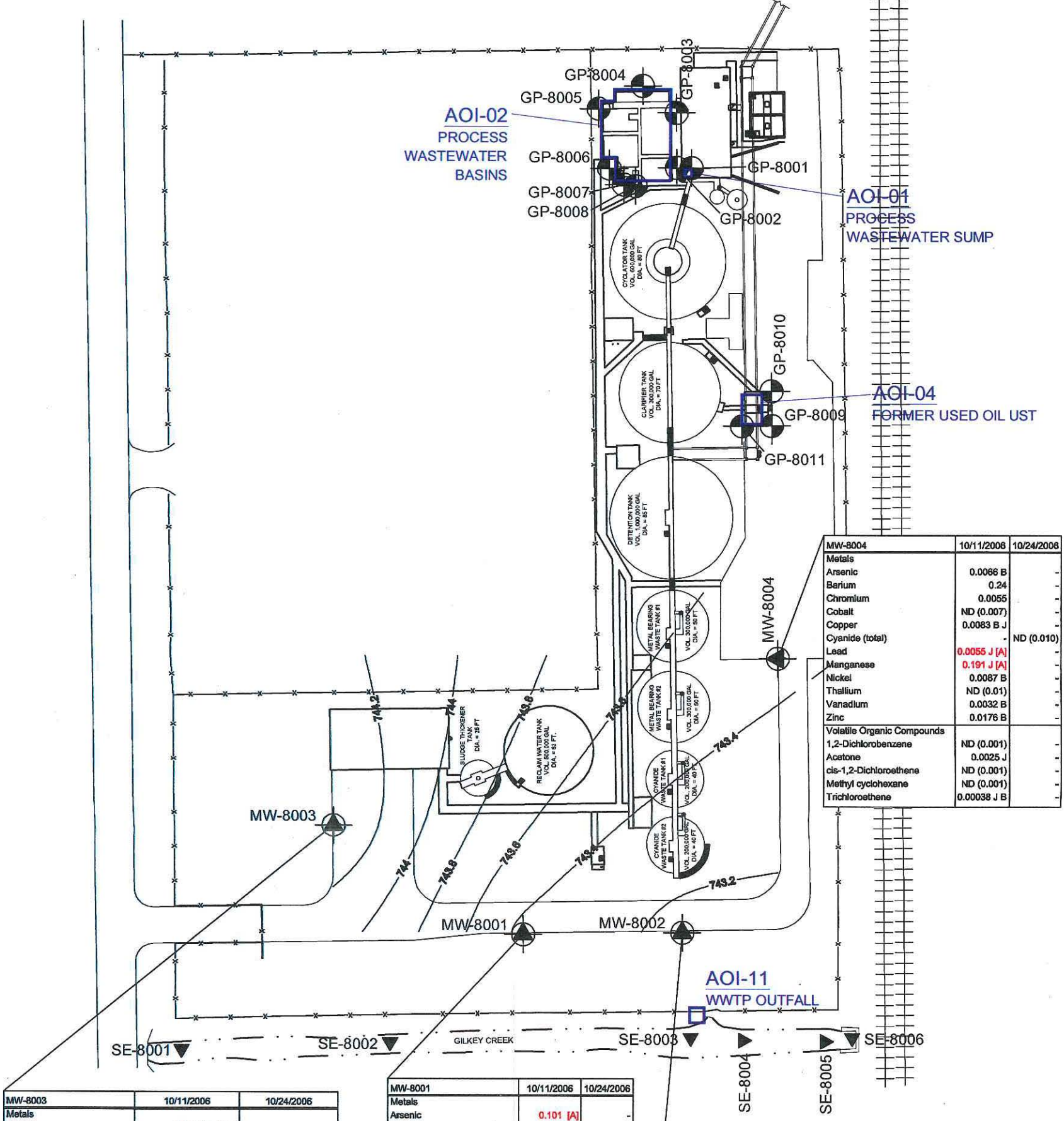
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ALDRICH**

DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
3026 ROBERT T. LONGWAY BLVD
FLINT, MICHIGAN

PROJECT LOCUS

SCALE: 1:24000
DECEMBER 2006

FIGURE 1



MW-8004	10/11/2006	10/24/2006
Metals		
Arsenic	0.0068 B	-
Barium	0.24	-
Chromium	0.0055	-
Cobalt	ND (0.007)	-
Copper	0.0083 B J	-
Cyanide (total)	-	ND (0.010)
Lead	0.0055 J [A]	-
Manganese	0.191 J [A]	-
Nickel	0.0087 B	-
Thallium	ND (0.01)	-
Vanadium	0.0032 B	-
Zinc	0.0176 B	-
Volatile Organic Compounds		
1,2-Dichlorobenzene	ND (0.001)	-
Acetone	0.0025 J	-
cis-1,2-Dichloroethene	ND (0.001)	-
Methyl cyclohexane	ND (0.001)	-
Trichloroethene	0.00038 J B	-

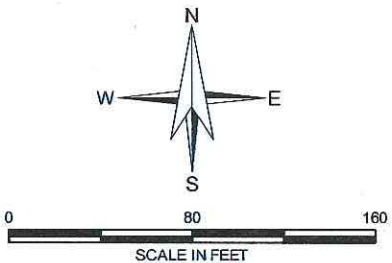
MW-8003	10/11/2006	10/24/2006
Metals		
Arsenic	0.0129/0.006 B	-
Barium	0.149/0.117	-
Chromium	0.0101/ND (0.005)	-
Cobalt	ND (0.007)/0.0043 B	-
Copper	0.0032 B J/0.0122 B J	-
Cyanide (total)	-	ND (0.010)/ND (0.010)
Lead	0.0053 J [A]/ND (0.003)	-
Manganese	0.881 J [A]/0.672 J [A]	-
Nickel	0.0026 B/0.0114 B	-
Thallium	0.0055 B [AE]/ND (0.01)	-
Vanadium	0.0145 [AE]/ND (0.007)	-
Zinc	ND (0.02)/0.0245	-
Volatile Organic Compounds		
1,2-Dichlorobenzene	ND (0.001)/ND (0.001)	-
Acetone	0.00083 J/ND (0.025)	-
cis-1,2-Dichloroethene	ND (0.001)/ND (0.001)	-
Methyl cyclohexane	ND (0.001)/ND (0.001)	-
Trichloroethene	0.0004 J B/0.00034 J B	-

MW-8001	10/11/2006	10/24/2006
Metals		
Arsenic	0.101 [A]	-
Barium	0.136	-
Chromium	0.005	-
Cobalt	0.0021 B	-
Copper	0.0111 B J	-
Cyanide (total)	-	0.0039 B
Lead	0.003 J	-
Manganese	2.03 J [A]	-
Nickel	0.0052 B	-
Thallium	0.0052 B [AE]	-
Vanadium	0.008 [A]	-
Zinc	0.0098 B	-
Volatile Organic Compounds		
1,2-Dichlorobenzene	ND (0.001)	-
Acetone	ND (0.025)	-
cis-1,2-Dichloroethene	0.00039 J	-
Methyl cyclohexane	0.00061 J B	-
Trichloroethene	0.00049 J B	-

MW-8002	10/11/2006	10/24/2006
Metals		
Arsenic	0.0147	-
Barium	0.129	-
Chromium	ND (0.005)	-
Cobalt	ND (0.007)	-
Copper	0.0028 B J	-
Cyanide (total)	-	0.011 [E]
Lead	ND (0.003)	-
Manganese	0.706 J [A]	-
Nickel	ND (0.025)	-
Thallium	0.0052 B [AE]	-
Vanadium	ND (0.007)	-
Zinc	ND (0.02)	-
Volatile Organic Compounds		
1,2-Dichlorobenzene	0.00042 J	-
Acetone	ND (0.025)	-
cis-1,2-Dichloroethene	0.0023	-
Methyl cyclohexane	ND (0.001)	-
Trichloroethene	0.00044 J B	-

- NOTES:
1. DATABOXES SHOWN IN MG/L.
 2. SEE SUMMARY TABLE FOR SCREENING CRITERIA.
 3. CHEMICALS SHOWN IN DATABOX WERE DETECTED IN ONE OR MORE GROUNDWATER SAMPLES ON THE SITE.
 4. RESULTS GREATER THAN GROUNDWATER SCREENING CRITERIA ARE SHOWN IN []:
A - RESIDENTIAL DRINKING WATER CRITERIA (PART 201)
B - DIRECT CONTACT GROUNDWATER (PART 201)
C - VOLATILIZATION TO RESIDENTIAL INDOOR AIR (PART 201)
D - VOLATILIZATION TO INDUSTRIAL INDOOR AIR (PART 201)
E - GROUNDWATER TO SURFACE WATER INTERFACE (PART 201)
F - SOLUBILITY
 5. CONTOURS FROM OCTOBER 2006.

- LEGEND:
- x-x- FENCE
 - - - WATER BODY
 - ⊕ APPROXIMATE SOIL BORING LOCATION
 - ⊕ APPROXIMATE MONITORING WELL LOCATION
 - ▼ APPROXIMATE SEDIMENT SAMPLE LOCATION



DELPHI AUTOMOTIVE HOLDINGS GROUP
DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
3026 ROBERT T. LONGWAY BLVD
DAYTON, OHIO

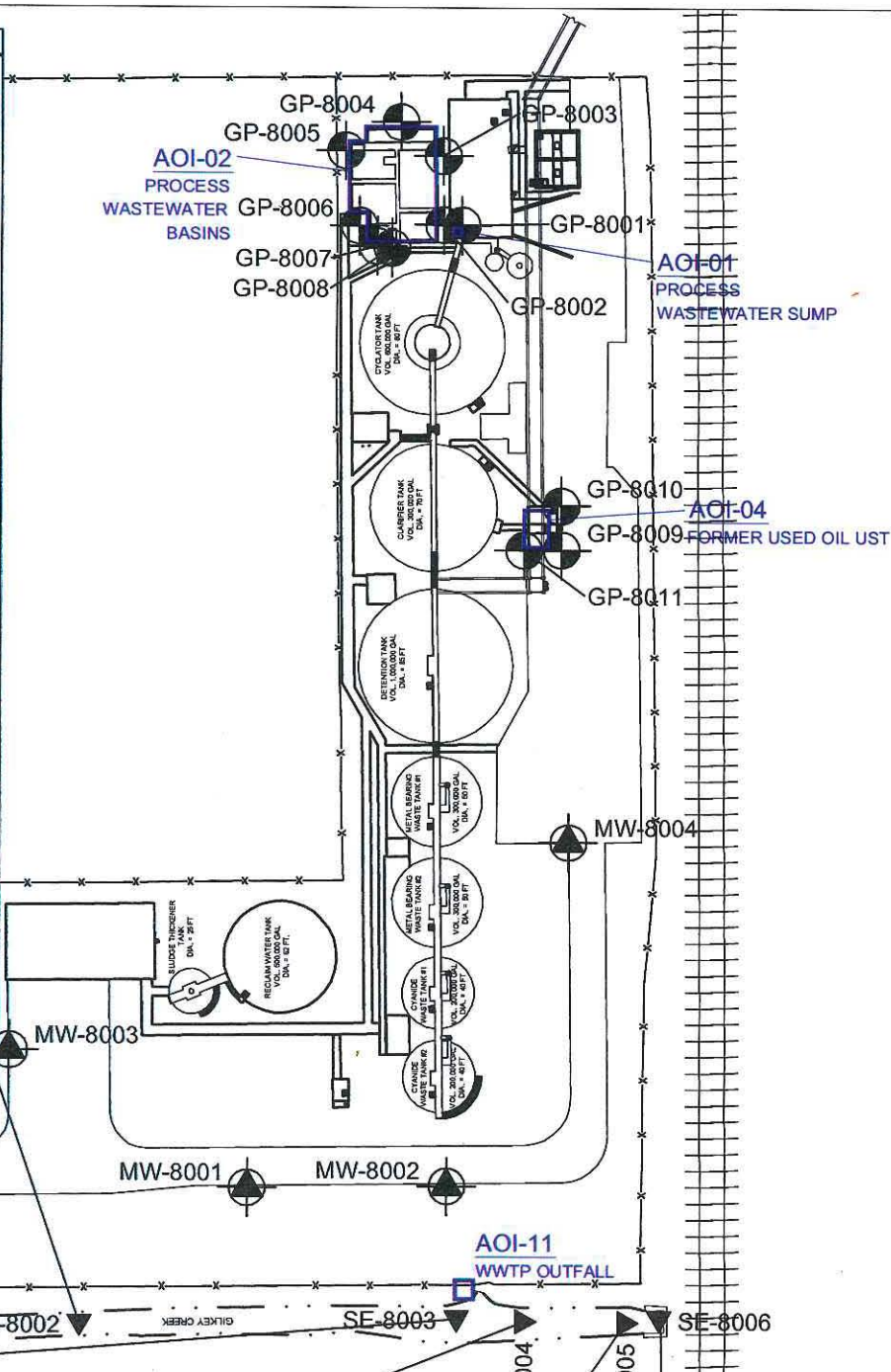
GROUNDWATER SAMPLING RESULTS

SCALE: AS SHOWN
NOVEMBER 2006

FIGURE 4

SE-8001	10/3/2006
Metals	
Antimony	ND (0.62)ND (0.65)
Arsenic	3.1/2.4
Barium	24.9/17.1
Beryllium	ND (0.20)ND (0.21)
Cadmium	0.23/0.21
Chromium	10.4/9.6
Cobalt	2.1/2.8
Copper	22.4/25.8
Cyanide (total)	0.29 B/ND (0.62)
Lead	35.8/31.8
Manganese	175 J/172 J
Mercury	0.025 B/0.020 B
Nickel	9.0/9.5
Silver	ND (0.50)ND (0.52)
Thallium	ND (1.0)0.87 B
Vanadium	5.9/5.1
Zinc	83.9/96.4
PCBs	
Aroclor-1254	0.085/0.16
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.022 J/ND (0.82)
Acenaphthene	ND (0.85)ND (0.82)
Acenaphthylene	ND (0.82)ND (0.85)
Anthracene	0.034 J/0.037 J
Benzo(a)anthracene	0.14 J/0.12 J
Benzo(a)pyrene	0.15 J/0.12 J
Benzo(b)fluoranthene	0.22 J/0.19 J
Benzo(g,h,i)perylene	0.11 J/0.1 J
Benzo(k)fluoranthene	0.085 J/0.098 J
bis(2-Ethylhexyl)phthalate	0.3 J B/0.45 J B
Caprolactam	ND (0.82)ND (0.85)
Carbazole	ND (0.82)ND (0.85)
Chrysene	0.18 J/0.18 J
Dibenzo(a,h)anthracene	0.023 J/ND (0.82)
Dibenzofuran	ND (0.85)ND (0.82)
Dimethyl phthalate	ND (0.82)ND (0.85)
Fluoranthene	0.38 J/0.4 J
Fluorene	0.029 J/ND (0.82)
Indeno(1,2,3-cd)pyrene	0.092 J/0.079 J
Naphthalene	ND (0.82)0.025 J
Phenanthrene	0.16 J/0.2 J
Pyrene	0.31 J/0.31 J
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	ND (0.26)ND (0.25)
Methyl acetate	0.12 J B/0.14 J B
Methyl cyclohexane	ND (1.2)ND (1.2)
Toluene	ND (0.1)ND (0.1)
Xylenes (total)	ND (0.15)ND (0.16)

SE-8002	10/3/2006
Metals	
Antimony	ND (0.64)
Arsenic	4.8
Barium	18.2
Beryllium	ND (0.20)
Cadmium	0.23
Chromium	33.7
Cobalt	2.8
Copper	20.0
Cyanide (total)	0.16 B
Lead	106
Manganese	178 J
Mercury	0.033 B
Nickel	18.9
Silver	0.40 B
Thallium	0.73 B
Vanadium	9.4
Zinc	134
PCBs	
Aroclor-1254	0.13
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.039 J
Acenaphthene	0.13 J
Acenaphthylene	ND (0.67)
Anthracene	0.26 J
Benzo(a)anthracene	0.88
Benzo(a)pyrene	0.83
Benzo(b)fluoranthene	1.2
Benzo(g,h,i)perylene	0.6 J
Benzo(k)fluoranthene	0.45 J
bis(2-Ethylhexyl)phthalate	0.72 B
Caprolactam	0.12 J B
Carbazole	0.19 J
Chrysene	1
Dibenzo(a,h)anthracene	0.14 J
Dibenzofuran	0.069 J
Dimethyl phthalate	ND (0.67)
Fluoranthene	2.1
Fluorene	0.13 J
Indeno(1,2,3-cd)pyrene	0.51 J
Naphthalene	0.046 J
Phenanthrene	1.4
Pyrene	1.8
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	ND (0.26)
Methyl acetate	0.12 J B
Methyl cyclohexane	ND (1.2)
Toluene	ND (0.1)
Xylenes (total)	ND (0.15)



SE-8003	10/3/2006
Metals	
Antimony	0.50 B
Arsenic	3.0
Barium	18.1
Beryllium	ND (0.21)
Cadmium	0.17
Chromium	49.1
Cobalt	2.7
Copper	24.0
Cyanide (total)	ND (0.65)
Lead	26.8
Manganese	201 J
Mercury	0.018 B
Nickel	7.7
Silver	ND (0.52)
Thallium	1.1
Vanadium	5.9
Zinc	453
PCBs	
Aroclor-1254	0.038 J
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.48 J
Acenaphthene	3 J
Acenaphthylene	ND (6.8)
Anthracene	4.2 J
Benzo(a)anthracene	12
Benzo(a)pyrene	9.9
Benzo(b)fluoranthene	13
Benzo(g,h,i)perylene	5.3 J
Benzo(k)fluoranthene	6 J
bis(2-Ethylhexyl)phthalate	0.68 J B
Caprolactam	1.3 J B
Carbazole	4.4 J
Chrysene	14
Dibenzo(a,h)anthracene	1.6 J
Dibenzofuran	2.2 J
Dimethyl phthalate	ND (6.8)
Fluoranthene	32
Fluorene	3.5 J
Indeno(1,2,3-cd)pyrene	5 J
Naphthalene	0.23 J
Phenanthrene	31
Pyrene	27
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	ND (0.26)
Methyl acetate	0.095 J B
Methyl cyclohexane	ND (1.2)
Toluene	ND (0.1)
Xylenes (total)	ND (0.16)

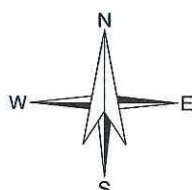
SE-8004	10/3/2006
Metals	
Antimony	0.43 B
Arsenic	2.9
Barium	19.8
Beryllium	ND (0.20)
Cadmium	0.18
Chromium	9.3
Cobalt	1.9
Copper	11.7
Cyanide (total)	ND (0.63)
Lead	20.9
Manganese	138 J
Mercury	0.030 B
Nickel	6.0
Silver	ND (0.51)
Thallium	0.78 B
Vanadium	5.7
Zinc	88.0
PCBs	
Aroclor-1254	0.039 J
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.022 J
Acenaphthene	0.16 J
Acenaphthylene	ND (0.33)
Anthracene	0.4
Benzo(a)anthracene	1.3
Benzo(a)pyrene	1.1
Benzo(b)fluoranthene	1.2
Benzo(g,h,i)perylene	0.75
Benzo(k)fluoranthene	0.7
bis(2-Ethylhexyl)phthalate	0.29 J
Caprolactam	ND (0.33)
Carbazole	0.35
Chrysene	1.5
Dibenzo(a,h)anthracene	ND (0.33)
Dibenzofuran	0.096 J
Dimethyl phthalate	ND (0.33)
Fluoranthene	3.5
Fluorene	0.22 J
Indeno(1,2,3-cd)pyrene	0.65
Naphthalene	0.088 J
Phenanthrene	3.1
Pyrene	3.3
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	0.053 J
Methyl acetate	0.11 J B
Methyl cyclohexane	0.085 J
Toluene	0.029 J
Xylenes (total)	0.07 J

SE-8005	10/3/2006
Metals	
Antimony	ND (0.67)
Arsenic	4.6
Barium	20.4
Beryllium	0.057 B
Cadmium	0.25
Chromium	11.1
Cobalt	2.8
Copper	39.4
Cyanide (total)	ND (0.67)
Lead	13.9
Manganese	297 J
Mercury	0.030 B
Nickel	12.1
Silver	ND (0.53)
Thallium	1.0 B
Vanadium	7.8
Zinc	163
PCBs	
Aroclor-1254	0.03 J
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.019 J
Acenaphthene	0.049 J
Acenaphthylene	ND (0.7)
Anthracene	0.11 J
Benzo(a)anthracene	0.44 J
Benzo(a)pyrene	0.47 J
Benzo(b)fluoranthene	0.7
Benzo(g,h,i)perylene	0.33 J
Benzo(k)fluoranthene	0.25 J
bis(2-Ethylhexyl)phthalate	0.43 J B
Caprolactam	ND (0.7)
Carbazole	0.12 J
Chrysene	0.59 J
Dibenzo(a,h)anthracene	0.078 J
Dibenzofuran	ND (0.7)
Dimethyl phthalate	ND (0.7)
Fluoranthene	1.4
Fluorene	0.059 J
Indeno(1,2,3-cd)pyrene	0.3 J
Naphthalene	0.024 J
Phenanthrene	0.76
Pyrene	1.2
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	ND (0.27)
Methyl acetate	0.14 J B
Methyl cyclohexane	ND (1.3)
Toluene	ND (0.11)
Xylenes (total)	ND (0.16)

SE-8006	10/3/2006
Metals	
Antimony	0.68
Arsenic	4.0
Barium	21.1
Beryllium	ND (0.21)
Cadmium	0.20
Chromium	7.0
Cobalt	2.8
Copper	11.2
Cyanide (total)	ND (0.67)
Lead	11.4
Manganese	205 J
Mercury	0.025 B
Nickel	6.7
Silver	ND (0.54)
Thallium	ND (1.1)
Vanadium	7.9
Zinc	155
PCBs	
Aroclor-1254	0.027 J
Semi-Volatile Organic Compounds	
2-Methyl naphthalene	0.083 J
Acenaphthene	0.057 J
Acenaphthylene	0.024 J
Anthracene	0.17 J
Benzo(a)anthracene	0.7 J
Benzo(a)pyrene	0.79
Benzo(b)fluoranthene	1.2
Benzo(g,h,i)perylene	0.56 J
Benzo(k)fluoranthene	0.38 J
bis(2-Ethylhexyl)phthalate	0.33 J B
Caprolactam	0.12 J B
Carbazole	0.18 J
Chrysene	0.94
Dibenzo(a,h)anthracene	0.13 J
Dibenzofuran	0.06 J
Dimethyl phthalate	0.097 J
Fluoranthene	2.1
Fluorene	0.073 J
Indeno(1,2,3-cd)pyrene	0.51 J
Naphthalene	0.076 J
Phenanthrene	1.2
Pyrene	1.8
Volatile Organic Compounds	
1,2,4-Trichlorobenzene	ND (0.27)
Methyl acetate	0.17 J B
Methyl cyclohexane	ND (1.3)
Toluene	ND (0.11)
Xylenes (total)	0.036 J

LEGEND:
 --- FENCE
 --- WATER BODY
 ○ APPROXIMATE SOIL BORING LOCATION
 ○ APPROXIMATE MONITORING WELL LOCATION
 ▼ APPROXIMATE SEDIMENT SAMPLE LOCATION

NOTES:
 1. DATA BOXES SHOWN IN MG/KG.
 2. SEE SUMMARY TABLE FOR SCREENING CRITERIA.
 3. CHEMICALS SHOWN IN DATA BOX WERE DETECTED IN ONE OR MORE SEDIMENT SAMPLES ON THE SITE.
 4. RESULTS SHOWN IN RED ARE GREATER THAN THE ECOLOGICAL SEDIMENT CRITERIA.



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SCALE IN FEET

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 DELPHI FLINT EAST WASTEWATER TREATMENT PLANT
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SEDIMENT SAMPLING RESULTS

SCALE: AS SHOWN
 DECEMBER 2006

FIGURE 6